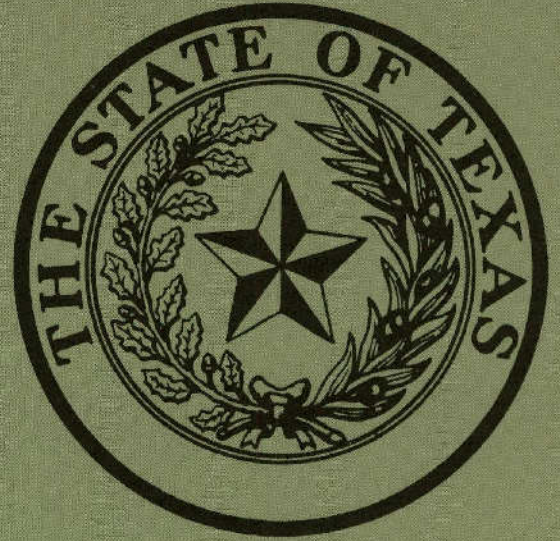


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**COMMUNITY  
CONFERENCE  
HANDBOOK**



THE ADVISORY COUNCIL FOR TECHNICAL – VOCATIONAL EDUCATION  
IN TEXAS

There are twenty-one members of the Advisory Council. The membership is recommended by the Governor, appointed by the State Board of Education, and confirmed by the State Senate. Council members serve staggered 6-year terms.

The Council membership and the appropriate category for each member is listed below:

...representing a cross section of industrial, business, professional, agricultural, and health service occupations.

Mr. William L. Jones, Jr., Chairman  
3605 Steck Avenue, Apt 1010  
Austin, Texas 78756

...person having special knowledge, experience or qualifications with respect to the administration of state or local technical-vocational education programs.

Mr. Marcos A. Vann, Vice-Chairman  
Regional Director  
Office of Civil Rights  
General Services Administration  
819 Taylor Street  
Fort Worth, Texas 76102

...person familiar with the programs of teachers' training for technical-vocational teachers in the post-secondary institutions.

Dr. James L. Boone, Jr., Head  
Department of Industrial Education  
Texas A & M University  
College Station, Texas 77840

...representing State Industrial and Economic Development Agencies.

Mr. John L. Cockrill  
President and C.E.O.  
LTV Ling Altec, Inc.  
P. O. Box 30385  
Dallas, Texas 75230

...person representative of the general public.

Mr. Ellwood E. Collins  
Executive Director  
Bowie County Economic Advancement Corp.  
Local Community Action Agency  
1510 Plum Street  
Texarkana, Texas 75501

...person representing technical-vocational education at the secondary school level.

Mr. S. P. Cowan  
Superintendent of Schools  
Rio Grande City Independent School District  
Rio Grande City, Texas 78583

...person familiar with vocational needs and problems of labor.

Mr. Don Gray  
P. O. Box 581  
Harlingen, Texas 78550

...person representative of local education agencies and school boards.

Mr. W. T. Crouch  
Route 1  
Itasca, Texas 76055

...person representing a cross section of industrial, business, professional, agricultural, and health service occupations.

Mr. Roy B. Davis  
1901 - 29th Street  
Lubbock, Texas 79411  
(retired 7/1/71  
President and General Manager,  
Plains Cooperative Oil Mill)

...representing a cross section of industrial, business, professional, agricultural, and health service occupations.

Dr. Michael E. DeBakey, President  
Baylor College of Medicine  
Houston, Texas 77025

...person actively engaged in technical training institutes.

Mr. Morris S. Webb  
Senior Vice President  
Texas State Technical Institute  
Waco, Texas 76705

(continued inside back cover)

# 1974



Education for  
Living and  
Making a Living

## **COMMUNITY CONFERENCE HANDBOOK**





THE ADVISORY COUNCIL FOR TECHNICAL – VOCATIONAL EDUCATION  
IN TEXAS

(Advisory Council to the State Board of Education)  
P. O. Box 1886  
Austin, Texas 78767

November 1, 1973

TO: CITIZENS OF TEXAS

I am pleased to greet you in behalf of the Advisory Council for Technical-Vocational Education in Texas and to express appreciation for your personal interest in education.

This handbook was prepared to provide background to you on technical, vocational, and manpower education in Texas in order that you might relate state activities to those of your community. The information presented is in a brief summary form. In the event you have a special interest that the Council can provide additional information, please contact the office at the address above.

When this handbook is used in the 1974 Community Conferences, it will serve as a study resource for individuals and groups as they review what the Council has done, what is happening in the State generally and how this relates to the thinking of the individual and the activities in the community.

The Advisory Council is required to provide a public forum on technical-vocational education in the state annually. A representative group of communities in the state have agreed to participate in these public forum activities through the Community Conferences. The communities have unique activities that they can share with citizens of the state through the report the Council will publish on the 1974 Community Conferences.

Participants in the Community Conferences will be asked to complete a response instrument in order that the Council will have personal opinions of many citizens with regard to issues in technical, vocational and manpower education.

You are asked to review the handbook carefully and in the event you did not have the opportunity to participate in a community conference and have an expression to make, please communicate this to the Council.

A special expression of gratitude to leaders in the communities who are responsible for the conference and to participants who take the time to express their concern for technical, vocational and manpower education in the communities and the state.

Sincerely,

A handwritten signature in cursive script, appearing to read "W. L. Jones, Jr.", written in dark ink.

William L. Jones, Jr.  
Chairman

*PURPOSE: "To establish a climate conducive to the development of technical, vocational, and manpower training in educational institutions in the State of Texas to meet the needs of industrial and economic development of the state."*

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\*These sections were taken from the Fourth Annual Report of the Advisory Council to the State Board for Vocational Education.

## COMMUNITY CONFERENCE BACKGROUND AND HANDBOOK USE

"People" and their needs as these relate to "Education for Living and Making a Living" and implications for the individual are the overall focuses of the Community Conferences. The following are the general objectives of the conferences:

1. to provide a public forum on technical, vocational, adult and manpower education in representative communities of the state,
2. to inform citizens about studies, proposals and opportunities in technical, vocational, adult and manpower education in the state,
3. to determine the effectiveness of local, state and national efforts to make educational experiences relevant to individual and community needs,
4. to secure information from citizens of the state concerning the educational needs of individuals and the community as a basis for planning and management decisions at the local and state levels and to provide input for the fifth annual reports of the Advisory Council.

These objectives should be considered as such, and the conferences conducted to meet the specific needs within each community. The achievement of objectives will be dependent upon the Council and communities working closely together.

The Council suggested the following procedure in developing the conference. However, the general planning committee's guidance with regard to the particular needs within the community should be used in developing the conference.

1. Identify within the community, groups, organizations and individuals representative of the community for the formation of a General Planning Committee. (A "Suggested Groups" list is in this section of the handbook.)
2. Select a Steering Committee of five to seven people, from the General Planning Committee to give specific direction to conference planning.
3. Select a Conference Coordinator with whom the Advisory Council will work and through whom dissemination of information will be made to committees and the community.
4. Schedule a Community Conference Planning Meeting in each community during the period November 26 and December 15, 1973, with the General Planning Committee and others interested in the conference. This handbook will be available for individuals and representatives of groups to review and secure copies for their group to review in preparation for the community conferences, which are tentatively scheduled for the period January 28 through February 28, 1974.

A Community Conference Task Force will be formed to represent the Council in the conference. The task force will be composed of approximately three Council members, Council staff and members of the State Legislature, State Board of Education and Coordinating Board, Texas College and University System. Similar official body representatives will also be invited to be members of the Council Task Force.

The major activities of the Community Conference Task Force during the conference are expected to be as follows:

1. A briefing and orientation meeting with the General Planning Committee at about 9:00 a.m. on the day of the conference.
2. Meetings with groups and representatives scheduled throughout the day will be the major activity of the task force in its effort to focus upon "people" and their concerns. (See suggested groups list.)
3. Speaking to civic and community groups and responding to media activities.
4. Depending upon community needs and preferences, a general community meeting during the evening hours. This is usually a 7:00 p.m. meeting with brief presentations by the Council and community leaders, then statements and questions.

Use of the Handbook will vary depending upon the background of the participant. Some participants who work in the field of technical, vocational and manpower education will find the information "old hat" so to speak. To others the information will be relatively unfamiliar.

As pointed out in the Chairman's letter of transmittal, if other Council reports that give more detailed information are needed, please notify the Council office of such needs.

You may be particularly interested in the membership of the Council. If so, the names, addresses and statutory membership category are listed on the inside covers of this handbook. Additional background on each member of the Council is available in a Council brochure. The brochure also contains the state statute under which the Council operates.

Several sections are taken from the Council's Fourth Annual Report to the State Board of Education and are so indicated by an (\*) in the Table of Contents. The sections "It is Time for Action...The Evidence" and "A Plan for Action...A Career Education Model" are especially designed to give the reader a general background to the recommendations of the Council that have been made to the State Board of Education since 1970. Many of the findings and concepts of the Council are summarized in these two sections.

The section with Tables, Charts and Rationale contains only the more critical tables and charts. There are five additional charts and tables in the Fourth Annual Report. These include: Chart I - Allocation of Vocational Teacher Units by Occupational Areas; Chart II - Vocational Education Enrollments as a Percentage of High School (9-12) Enrollments (1951 through 1973); Table V-A - Placement of Program Completions in Secondary Vocational Education Programs; Table V-B - Placement of Program Completions in Post-Secondary Vocational Education Programs; Table V-C - Placement of Program Completions in Adult Vocational Education Programs.

Advisory Council recommendations are summarized by topics. These seventeen (17) topics consume in excess of 50 pages in the Fourth Annual Report. For specific language of the recommendations and action taken by the State Board of Education, reference should be made to the Fourth Annual Report.

Council responsibilities under State Statute has reference to Section 31.33 of the Texas Education Code. This section outlines fourteen (14) specific responsibilities to technical, vocational and manpower education in the state. Other sections of the statute outline other responsibilities that are not as directly related to programs.

In reviewing the Handbook, the following questions might be useful to the reader:

1. To what extent has the Advisory Council fulfilled its responsibilities under the program responsibilities of the state statute?
2. Do the Advisory Council recommendations represent valid concerns in the state? In your community?
3. Do the Advisory Council recommendations offer reasonable suggestions for action?
4. Does the local education program offer a balance in preparing students for "living" and "making a living?"
5. Is there equal education opportunities for all groups of citizens in the community?
6. Are vocational, technical and manpower education programs sufficiently comprehensive and available to provide all citizens to be adequately prepared for jobs in the community or employment area?
7. What are the major unmet needs for education in the community?



## SUGGESTED LIST OF COMMUNITY GROUPS FOR CONFERENCE INVOLVEMENT

- |   |  |
|---|--|
| <p>1. Members of Boards of Education<br/>(Local, State, Coordinating Board)</p> <p>2. Educational Administrators<br/>(All institutional levels)</p> <p>3. Faculty (All institutions)</p> <p>4. Directors, Supervisors &amp; Counselors<br/>(All institutions)</p> <p>5. Representatives of Special Needs Groups<br/>Adults<br/>Disadvantaged<br/>Handicapped<br/>Veterans</p> <p>6. Student Groups - All levels</p> <p>7. Former Students<br/>(Employed and in school)</p> <p>8. Members of Vocational Advisory<br/>Committees</p> <p>9. Education Service Center Personnel<br/>(and similar personnel)</p> <p>10. Representatives of Professional<br/>Organizations</p> <p>11. State and Federal Agencies<br/>Texas Education Agency/USOE<br/>Texas Employment Commission/USDOL<br/>Texas Rehabilitation Commission/DHEW<br/>Department of Public Welfare/DHEW<br/>Department of Mental Health and<br/>Mental Retardation/DHEW<br/>State Department of Health/DHEW<br/>Texas Industrial Commission<br/>Military/DOD</p> <p>12. Minority Groups<br/>G. I. Forum<br/>Urban League<br/>LULAC<br/>NAACP<br/>and others</p> | <p>13. Organized Labor and/or Employee Groups</p> <p>14. Chambers of Commerce</p> <p>15. Business and Industry Groups, such as<br/>Industrial Development Groups<br/>Texas Manufacturers Assn., Local<br/>Associated General Contractors, Local<br/>Mechanical Contractors, Other<br/>Local Employer Groups</p> <p>16. Health Industry Groups &amp; Organizations</p> <p>17. Apprenticeship Committee Members</p> <p>18. Private School Representatives</p> <p>19. Private Employment Agencies</p> <p>20. Ministerial Organizations and<br/>Church Groups</p> <p>21. Community Organizations<br/>Civic Clubs<br/>Parent/Student Teacher Assn.<br/>Women's Clubs<br/>Professional Organizations<br/>and others</p> <p>22. Manpower &amp; Other Planning Groups</p> <p>23. Members of the State Legislature</p> <p>24. Local and County Government Officials<br/>Regional Council of Government</p> <p>25. News Media</p> <p>26. Interested Citizens</p> |
|---|--|

The above list should be used as a guide. Some communities will have most of these groups and others, while others will not have every group represented.

## A SUMMARY REPORT OF THE ACTIVITIES OF THE COUNCIL

The Council continues work on the responsibilities outlined in Senate Bill 261, Sixty-First Legislature (Chapter 31, Texas Education Code), which expanded the responsibilities of the State Advisory Council as envisioned in the Vocational Education Amendments of 1968, U. S. Congress. Responsibilities of the Council have been further expanded by both federal and state statutes. Initial responsibilities of the Council are summarized broadly in Section 3 of the above referenced state statute, "...to cause to be established a climate conducive to the development of technical, vocational, and manpower training in educational institutions in the State of Texas to meet the needs of industrial and economic development of the state."

Members of the Council are recommended by the Governor, appointed by the State Board of Education and confirmed by the State Senate for six-year staggered terms. The twenty-one members of the Council annually give over 200 man days to formal Council and Committee meetings and hearings. This does not include work done as individual members on Council responsibilities, and work with groups and organizations in their areas of the State.

This summary report will not cover many of the detailed responsibilities and activities of the Council and staff. Following is a tabulation of the major reports published by the Council:

<u>General Description of Reports</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
1. Annual Reports to the Governor	March	April	April	April
2. Annual Reports to the State Board for Vocational Education	Sept.	Sept.	Oct.	Nov.
3. Biennial Reports to the State Legislature	Dec.		Dec.	
4. Advisory Council Brochures	May	Oct.		Nov.
5. Summaries of Annual Reports for Use in Public Forum Meetings	Sept.	Sept.		Jan.
6. Proceedings and Reports on Public Forum Meetings (1) Governor's Conference, (2) Regional Hearings, (3) Community Conferences	July (1)	March (2)	July (3)	June (1)
7. Legislative Directed Studies		March SR 865	Dec. SCR 89	March SCR 11
8. Proceedings...Teacher Education Hearing		March		
9. Guidance Services Handbook				Oct.

A monthly publication, ACTIVE News, is prepared and mailed to over 2500 persons throughout the state. Publication was begun in May 1970. Numerous Staff Analyses, Working Papers, Background Information Data, Surveys and other similar activities are carried out by the Council for its use and dissemination.

The Council has produced a 16-minute color 16 mm film, entitled "The Future...My Destination" and twenty copies are used throughout the state. Fifty sets of a slide/tape presentation entitled "A Redirected Education System" are widely used.

The Council has provided a public forum for over 10,000 citizens through two Governor's Conferences, Regional Hearings and Community conferences and has held meetings throughout the state informing itself in all areas of responsibilities of the Council.

## IT IS TIME FOR ACTION. . . . .THE EVIDENCE

"A Redirected Education System...Education for Living and Making a Living" has been selected by the Advisory Council as the title of its Fourth Annual Report.

Since its establishment in 1969, the Advisory Council has given intensive study to needs in technical-vocational education and other education experiences as they relate to realistic needs of individuals as well as present and future labor market demands. The findings of this study reveal a great imbalance between the education experiences students receive and those needed to most effectively function in our present society and economy.

Man's "genius" or creative ability in recent decades has made the work world both complicated and fast changing. Jobs are not only requiring greater skill on the part of workers, but also are being phased out, created or updated at a pace a thousand fold that of our fathers and grandfathers.

Survival in this jungle of steel, wires, paperwork and people commonly known as the work world is dependent upon a continuous process of wise and informed career planning. This planning must be an integral part of the education process.

The Council is not unaware nor unappreciative of the contributions of education to the society and economy; nor is the Council unmindful of the many exciting innovations taking place in every area of the state in educational experiences. Citizens have been generous in their support of education in many respects. The professional educator has spent more time and effort in preparation for his/her job than at any time in our history, yet it could appropriately be said, "we have to run fast in order to stand still" in this time of explosive change.

In the first report of the Council to Governor Smith in 1970, "Concern I," was listed as ATTITUDE, and the following statement made: "At the very heart of our problem is attitude. This attitude is shared by businessmen, labor leaders, administrators, teachers, parents, and students --- we are all guilty."

Governor Preston Smith in a special message to participants in the 1971 Regional Hearings of the Council, reminded citizens of their local autonomy in education, challenged them to assert their leadership in determining the needs of their communities, and work to that end. He said, "We shouldn't wait on a special solution from Washington or Austin. It might not fit when and if it arrives."

In the Keynote Address to the 1973 Governor's Conference on Technical-Vocational Education, Governor Dolph Briscoe stated, "I have long supported career-oriented education and it is my objective as Governor to see that technical-vocational education is developed as a full-partner with our academic programs down to the eighth grade level. I will work with the Legislature and our State Board of Education and others in bringing our education experiences in line with the needs of individual citizens as well as the needs of business and industry.

The Council believes "IT IS TIME FOR ACTION," and the action must be deliberate but positive. Some evidences of the urgency of action are outlined below:

1. The U. S. Department of Labor reported several years ago that the work force of the nation will require no more than 20% with a bachelor or higher degree, 25% will require technical skills and the remaining 55% will require varying levels of vocational skills.
2. HOWEVER, 75% of our educational experiences in the secondary schools of the state are directed toward a bachelor or higher degree. This is supported by Council and other studies in 1972 and reveals that 67% of our H.S. Seniors plan to pursue education beyond high school and 44% of our 1972 graduating seniors plan to get a bachelor or higher degree. A 1973 Austin Community Survey revealed that approximately 80% of students and parents aspire for a college degree.

3. The survey of 1972 High School Seniors revealed that less than 15% of their credits in four years of work could be related directly to preparation for work.
4. There is conclusive evidence that elementary and secondary curricula are "heavily influenced" by college and university entrance requirements. A 1973 North Texas State University study entitled, "Elementary Basal Readers and Work Mode Bias" states, ".....From the data, it is possible to infer that work mode bias in textbooks reflects a deep and pervasive general cultural bias against technical-vocational-unskilled work modes, and this general bias strongly inhibits rational reconstruction of curricular patterns."
5. EVALUATION of individuals in courses and curricula is usually done by measuring instruments and techniques in support of further formal education activities and so called "academic achievement." Little effort is made to evaluate the individual's application of knowledge and these skills to demands in the job market.
6. The Texas Education Product Study of 1973 revealed that high school graduates and leavers of the classes of 1963-64 and 1968-69 viewed the guidance services of their schools to be negative in both the "academic" and "vocational" areas. The Advisory Council has contended that most career choices are by DEFAULT rather than DESIGN.
7. Education programs are "time-based" - meaning that all students are assigned to programs for a specific time without regard to achievement of a specified level or their ability to perform. It is evident that the time has come for instruction to be based upon performance based objectives with criterion referenced measurements. However, many teacher education institutions in Texas are rejecting efforts of the State Board of Education to implement performance based teacher education.
8. QUALITY EDUCATION has often been identified as being more sophisticated and higher levels of achievement in abstraction with little regard for the needs of the individual. A recent study at Marshall University showed that relating instruction to career objectives increased levels of achievement by 11 percent in language, 24.5 percent in mathematics and 18 percent on occupational awareness.
9. There is "traditionalism" and other constraints that renders the education system unresponsive to change. The education system must focus upon the needs of the INDIVIDUAL and our society, not upon the needs of the institutions or system. The system MUST be flexible and responsive to INDIVIDUALS and their needs based on an interaction of the factors of INTERESTS, APTITUDES, ABILITIES, and CIRCUMSTANCES.
10. The respondents in the Texas Education Product Study, numbering over 5,000, concluded that the curriculum must be flexible and the instruction individualized. There was substantial rejection of "required" courses. In identifying their best teacher, their knowledge of subject matter was a poor third in their priorities. They gave first priority to the ability to communicate with students and to create interest. Second priority was the teacher's interest in students as individuals.
11. The unwillingness of the education system to relate education experiences to "life coping skills" has produced many with attitudes of "rebellion," "frustration" resulting in "unemployment" and "a life that will contribute something less than it could have."
12. The Council has proposed Supplementary Delivery Systems to provide realistic job preparation opportunities for most citizens. This recommendation or feasible alternatives have received little consideration. It might be a problem of priorities. The state has allocated approximately \$50 million for area school construction at secondary and post-secondary institutions since 1965 while one state university has expended in excess of \$50 million in capital improvements in only five years.

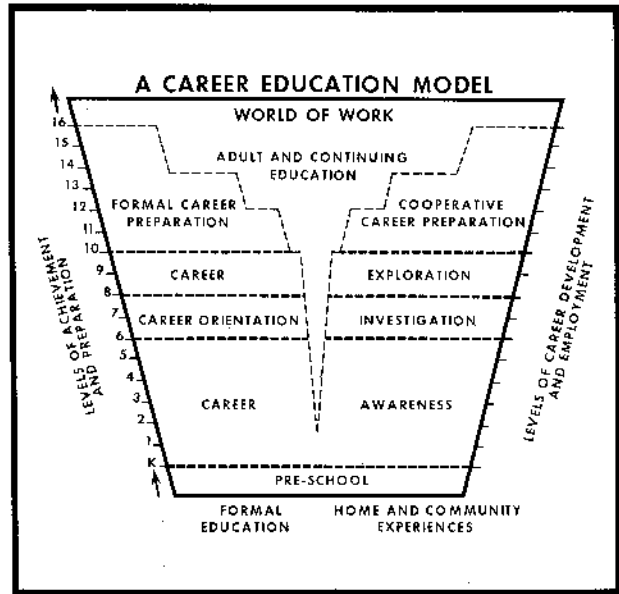
"WHO IS REALLY LISTENING?"



## A PLAN FOR ACTION. . . . . A CAREER EDUCATION MODEL

The model discussed in "A Plan for Action" was published by the Advisory Council in October 1972 and the model or adaptations of the model have been widely used. The model and accompanying rationale seem to embody basic guidelines for conceptualizing a program for career education at the local level. The Texas Education Agency has published guidelines, materials have been produced and experiences documented from several demonstration projects in the state. Cost data of "redirection" of education experiences are emerging, providing the basis for meaningful and realistic planning for statewide implementation.

Career Education is not a new name for vocational, technical, occupational or any other segment or phase of education; but is the embodiment of the career thrust or emphasis in all educational experiences at all levels. To effectively implement such a plan, first of all will require an understanding of what is involved and secondly, a commitment to the concept to more effectively serve all the needs of all citizens in all communities.



The diagram of "A Career Education Model" above should be considered by leaders in the development and building of education, home and community experiences that will result in a meaningful and rewarding role for every citizen in our society and economy.

Social, economic, industrial and technical changes have brought tremendous responsibilities upon our education system. The employer still wants the worker prepared with basic or what is traditionally called academic skills. He also requires a wide range of specific skills traditionally acquired through vocational, technical and occupational programs. In addition, the worker must have acceptable employability skills to include dependability, honesty, promptness, job appreciation, initiative and demonstrate his responsibility. The preparation of workers with such comprehensive responsiveness requires a united effort of the home, community and school. The emphasis on levels should not indicate an inflexible "lock-step" with age, years of schooling, semesters, credits and work entry. The levels provide an element of evaluation of achievement in career development and preparation for employment.

- K-6 CAREER AWARENESS - This phase of the model should help the individual develop an awareness of careers, understanding and appreciation for the dignity of work, and the personal and economic relationships of work. (As this phase relates to education, it would require ancillary personnel and resources with the principal responsibility resting with the teacher incorporating these objectives into all educational experiences.)
- 6-8 CAREER ORIENTATION AND INVESTIGATION - (The levels shown are very flexible because of a variety of structures of levels in schools.) In this phase of the model, the individual would gain a wide exposure to a variety of careers, their requirements and rewards. The individual would begin to relate these to his own interests, abilities, aptitudes and circumstances. In addition to the teacher, more guidance services would be required and some additional instructional personnel as well as materials and instructional resources.
- 8-10 CAREER EXPLORATION - In this phase of the model the individual should have "hands on"

experiences in laboratories, shops and/or community resources in as many clusters of occupations as possible in order to further validate his own personal interests, aptitudes and abilities. The total school, home and community resources will be needed to give exposure to the multitude of careers.

- 9-12 PREPARATION FOR CAREERS - With the awareness, orientation, investigation, and exploration phases of career development as a background and guide, the individual should be prepared to give more specific direction to preparation efforts. These directions will be many and require comprehensiveness of offerings to support the career goals of all individuals.

Some individuals may move toward rather specific skill development through vocational programs. Some may pursue skill development within a cluster of occupations for entry into apprenticeship or other on-the-job training. Preparation may be achieved through laboratory and/or cooperative part-time training or work experiences.

Post-secondary and/or university preparation may be required in the career development plan of others.

Regardless of the level of formal preparation needed or desired, the options should be left open to the individual at all times and levels.

- 13-16 PREPARATION FOR CAREERS - Preparation at this level will normally be quite specific and will require substantial flexibility of institutions to accommodate a series of educational and work experience adjustments in directions of career preparation. The role of institutions should be carefully related to programs in previous institutions to prevent duplication.

ADULT The education community must accept the responsibility of the multitude of needs of our adults in education, regardless of the factors that generated these needs whether they be basic education, retraining, upgrading, avocational or others. This phase is needed to give more mobility within the work force to enhance its effectiveness and efficiency. It should be noted on the model that Adult and Continuing Education may occur at all levels of achievement and career preparation. Texas moved closer to a realistic adult education delivery system with final action on state legislation in May 1973. The further development of this commitment should bring equal opportunity to many disenfranchised adults.

## TABLES, CHART AND ACCOMPANYING RATIONALE

The tables and charts in this section are taken from the Council's Fourth Annual Report to the State Board of Education. Tables and charts that have been omitted may be reviewed in the Fourth Annual Report which is available upon request from the Council office.

TABLE I - page 11 of this report, is a bench mark table that provides an analysis of concentration, or lack thereof, of population and the implications for education planners in the state. Previous edition of this table shows 344 school districts with 300 or more H.S. ADA as compared with 358 in current table. Larger districts now represent 89.1% of student population as compared with 88.6% two years ago.

TABLE II - page 12 of this report gives a 10-year review of the development of public school occupational programs by occupational areas. The three school years chosen are significant in that 1962-63 precedes the passage of the Vocational Education Act of 1963 and 1967-68 precedes the passage of the Vocational Education Amendments of 1968. The influence of this legislation and substantial state legislation is most significant. The table reveals not only growth within occupational areas, but increases from four to thirteen occupational area entries in 10 years. These developments indicate availability and comprehensiveness of offerings. Display of data on this chart can be misleading in that enrollments shown may be for one, two or three hour classes and laboratories. A more descriptive method would be to convert enrollments to student contact hours and to include many activities now carried out by vocational teachers that are not reflected in enrollments.

CHART III, page 13 of this report, does not adequately portray the interesting and exciting happenings in post-secondary education in the state, but perhaps some supplemental information can help.

- the funding levels for post-secondary technical-vocational education programs in the state's over 50 community colleges and technical institutes has increased from \$7 million in 1969 to \$11.3 for 1971, to \$21.1 for 1973, to \$41.2 for 1975.
- the comprehensiveness of program offerings is demonstrated in the fact that in 1966 a total of 127 occupational programs were offered in 46 occupational areas; this is compared to 711 programs in 1972-73 and 872 programs in 1973-74 in over 100 occupational areas. The comprehensiveness and scope of a variety of community services has increased substantially in the last few years.

TABLE III, page 14 of this report, is a summary of program enrollments from 1966-73 for programs administered by the Division of Adult and Continuing Education.

In addition to programs cited in Table III, the Divisions of Public School Occupational Programs and Post-Secondary Programs are responsible for adult vocational education programs offered in connection with regular programs in the Occupational Areas of: Agriculture, Homemaking, Distribution, Health, Office, Trades and Industry and Technical Education.

Total enrollments in adult vocational programs administered by these two divisions increased from 238,656 in 1971 to 265,484 in 1972. Figures for 1973 are not yet available. Of this total for 1971-72, 22,785 adults were enrolled in "preparatory" programs, 236,226 in "supplemental" programs, and 6,473 in "apprenticeship" programs. The percentage of adults served through preparatory, supplemental and apprenticeship programs within the Occupational Areas during 1971-72 were:

Agriculture	34.3%
Homemaking	41.3%
Distribution	8.0%
Health	1.6%
Office	5.4%
Trades & Industry & Technical	9.4%

TABLE IV, page 15 of this report, is an attempt to provide information on the sources of training that provides persons ready for the job market. Every attempt has been made to verify this data in the absence of a Supply/Demand Information System that should provide this and other data. There will no doubt be some duplications and other inconsistencies, but this appears to be the best estimate from sources listed. The data represents those persons who have completed training and are ready for employment. Not included are those who enter the military, continue their education or are for other reasons, not available for employment.

TABLE VI, page 16 of this report is an attempt to give some perspective of the levels of funding of the various educational activities in the state. In addition to the notes on the Table, the following explanations should be made:

- Funding reported for Senior Colleges, Universities and Junior Colleges does not include tuition, building use fees and other institutional income of similar nature.
- The fall headcount is usually the largest of the fall, spring and summer enrollment periods.
- Appropriations for junior colleges does include funds appropriated to Texas State Technical Institute for Occupational Programs.



TABLE I

## AN ANALYSIS OF PUBLIC SCHOOL DISTRICTS BY SIZE AS DETERMINED BY HIGH SCHOOL ADA

GROUP SIZE OF ISD'S	NO. DIST'S	% OF TOTAL NO. DIST.	TOTAL HS ADA	% OF TOTAL HS ADA
20,000 or more	3	.32	110,091	16.3
15,000 thru 19,999	2	.21	34,198	5.0
10,000 thru 14,999	3	.32	37,597	5.2
5,000 thru 9,999	15	1.61	102,199	15.0
2,500 thru 4,999	24	2.58	88,088	12.9
1,000 thru 2,499	67	7.19	102,808	15.1
900 thru 999	20	2.15	18,981	2.8
800 thru 899	16	1.72	13,490	2.0
700 thru 799	25	2.68	18,785	2.8
600 thru 699	23	2.47	14,627	2.1
500 thru 599	34	3.65	18,495	2.1
400 thru 499	51	5.47	22,888	3.4
300 thru 399	75	8.05	25,713	3.8
<hr/>				
SUB TOTAL				
300 thru 20,000	358	38.42	607,960	89.1
<hr/>				
200 thru 299	112	12.02	27,446	4.0
100 thru 199	219	23.50	32,305	4.7
50 thru 99	156	16.73	11,566	1.7
Under 50	87	9.33	3,309	.5
<hr/>				
SUB TOTAL				
299 and less	574	61.58	74,625	10.9
<hr/>				
TOTAL	932(1)	100.00	682,585	100.0

(Tabulation made from 1972-73 Vocational Education Unit List, TEA, Utilizing 1971-72 HS Average Daily Attendance data in unit list)

(1) 932 Public School Districts having Vocational Education out of 1156 Public School Districts in the State.

TABLE II  
 PERIODIC DATA ON VOCATIONAL EDUCATION PROGRAMS AT SECONDARY LEVEL, 1962-73  
 ( ) indicates duplicated count with grand totals included in program totals.  
 \*Areas offering CVAE, Agriculture, Homemaking, Industrial, and Office.  
 \*\*1 hour units - equal to approximately 30 - 5 hour units

OCCUPATIONAL AREA	1962-63 School Year				1967-68 School Year				1972-73 School Year			
	NO. SCHOOL DISTS.	NO. TEACH. UNITS	TOTAL ENROLLMENTS	AVG. ENROLLMENT PER UNIT	NO. SCHOOL DISTS.	NO. TEACH. UNITS	TOTAL ENROLLMENTS	AVG. ENROLLMENT PER UNIT	NO. SCHOOL DISTS.	NO. TEACH. UNITS	TOTAL ENROLLMENTS	AVG. ENROLLMENT PER UNIT
AGRICULTURE	873	1,135	46,603	41	866	1,122	49,632	44	844	1,275	54,777	43
AGRICULTURE COOP/PL						(142)	(1,190)	(9)	(303)	(483)	(5,544)	(12)
DISTRIBUTION	120	161	5,764	23	196	301	10,511	35	314	552	19,484	35
HEALTH		1				9	194	22	42	69	1,914	28
HOMEMAKING	937	1,618	102,294	62	941	1,948	141,459	72	915	2,455	182,657	74
HOMEMAKING COOP/PL						(26)	(537)	(21)	(189)	(299)	(6,647)	(22)
INDUSTRIAL	123	283	12,223	43	213	742	22,663	31	324	1,393	37,374	27
CVAE*					59	190	7,367	39	237	774	22,681	29
OFFICE					121	163	5,694	35	211	447	14,268	32
TECHNICAL		5	214	43		37	1,578	43	43	67	2,289	34
ANCILLARY										403		
VOC. EDU. OF HANDICAPPED									79	206	5,054	25
OCC. ORIENT.									28	79	12,065	**153
TOTAL	965	3,203	167,209	51	966	4,512	239,098	53	935	7,720	352,563	46
HS ENRL. 9-12			553,668				707,900				823,900	

CHART III

AN ANALYSIS OF THE DEVELOPMENT OF POST-SECONDARY TECHNICAL-VOCATIONAL PROGRAMS  
1966 THROUGH 1973

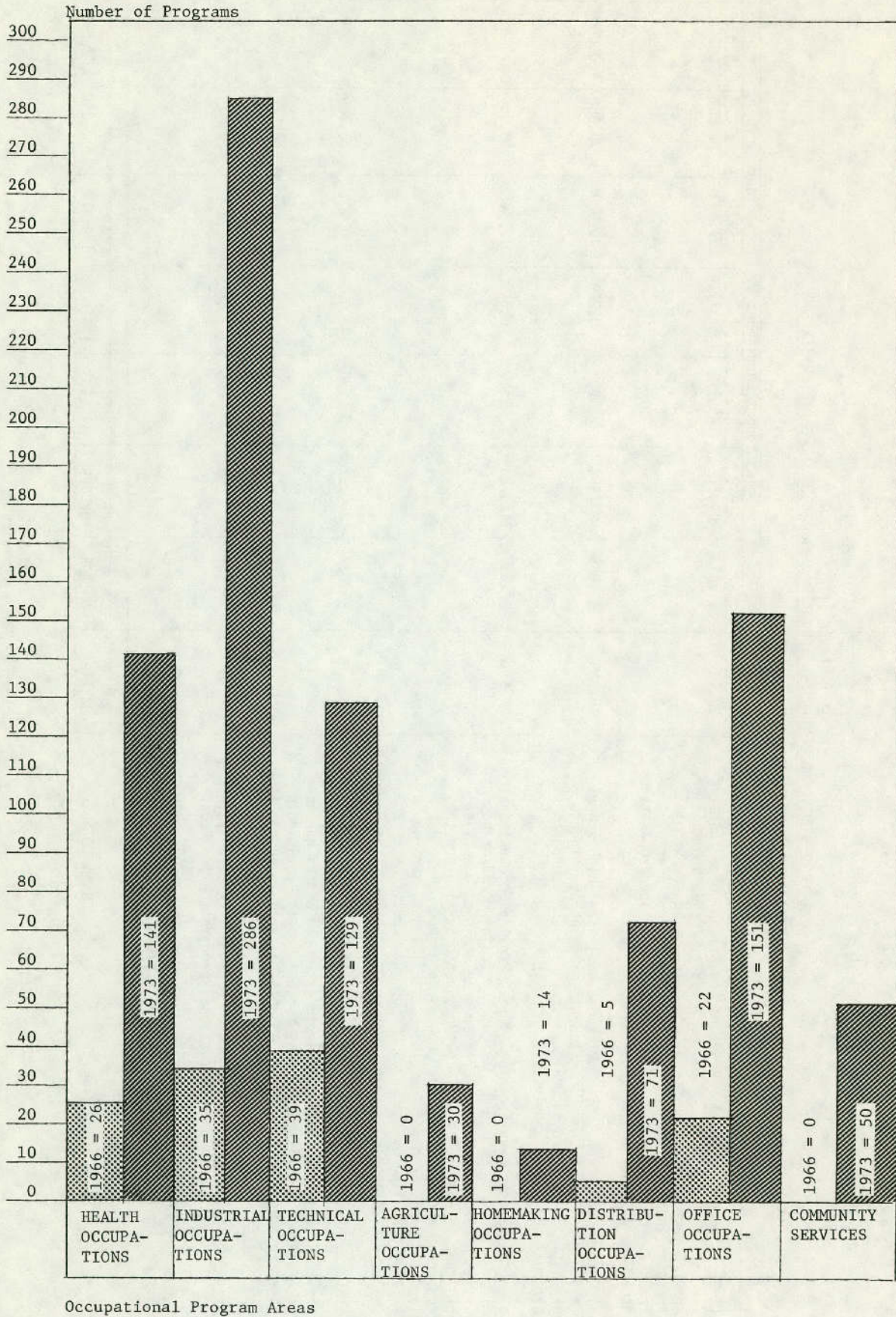




TABLE III  
SUMMARY OF ADULT AND CONTINUING EDUCATION PROGRAM IN THE STATE OF TEXAS

Name of Program and What it Does	Student Enrollment By Fiscal Year								
	1966	1967	1968	1969	1970	1971	1972	1973	TOTAL
<u>Adult Basic Education (ABE)</u> : Provides educational opportunities to those adults 16 years of age or older with less than a high school education. The course of instruction includes reading, writing, and arithmetic as well as citizenship, social studies, consumer education, and preparation for the General Education Development (GED) Test.	57,137	31,673	44,772	46,171	53,111	57,439	82,651	70,000	442,954
<u>Civil Defense Education (CDE)</u> : Provides adults and high school students with the training to handle both man-made and natural disasters through a program of personal and family survival.	19,368	23,858	23,982	25,802	30,000	45,000	70,080	100,000	338,090
<u>Manpower Development and Training (MDT)</u> : Provides occupational training and/or basic education needed by the unemployed or underemployed adults to enable them to obtain jobs in skill occupations; also provides refresher of additional training needed to upgrade the underemployed into higher paying positions: training is offered only in skills identified by the Texas Employment Commission as "shortage occupational."	6,411	7,312	12,723	10,500	10,612	19,047	18,986	17,650	103,241
<u>Veterans Education (VE)</u> : Provides a wide scope of educational training to veterans who have served on active duty in the Armed Forces since the end of the Korean War. Training is available in institutional courses, including college, vocational, and business schools, as well as apprenticeship and other programs of on-the-job training.	-	21,237	25,952	36,090	45,000	50,904	63,480	72,839	315,502
<u>Work Incentive (WIN)</u> : Provides basic education, skilled training, and instructional preparation for GED for eligible welfare recipients. (Many industries in Texas now recognize the GED certificate awarded to persons who pass the test as the equivalent of a high school diploma.)	300	325	350	400	1,086	2,082	2,043	2,106	8,692
GRAND TOTALS	83,216	84,405	107,779	118,963	139,809	174,472	237,240	262,595	1,208,479



TABLE IV

## PERSONS TRAINED AND AVAILABLE FOR EMPLOYMENT, BY SOURCES, 1969, &amp; 1971-73

<u>Training Source</u>	<u>1969</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	
Public Secondary Vocational Education	16,993	23,154	27,855	35,764*	
Public Post-Secondary Institutions	4,618	9,355	19,549	29,338*	
Vocational Rehabilitation Commission	10,253	16,956	21,907	25,868	
Job Corps in Texas	3,432	3,428	4,038	4,292	
Manpower Development Training Programs	8,231	8,270	10,142	11,811	
On the Job Training (Including NABS-JOBS)	17,880	10,650	8,203	4,925	
State Apprenticeship Training	8,710	9,530	9,230	9,200	
Private Vocational & Business Schools	10,407	11,961	14,113	16,653*	
State Board of Examiners	11,282	16,169	25,919	38,613	
Project Transition			2,324	5,644	
<hr/>					
* Estimates	TOTALS.....	91,806	109,473	143,280	182,108

The above data does not include the very important contribution made by employers through on-the-job training, company training and education programs and re-education programs. It has been estimated by the U.S. Chamber of Commerce that business and industry spend \$15 billion annually in the above education activities.

The Department of Defense has extensive technical school facilities in Texas. Even though the supply does not accrue directly to the Texas job market, the training does take place in the state. (For example - as a part of the Department of Defense activities in Texas, the Air Training Command during FY 1970, taught or was responsible for conducting 2,307 technical training courses in 39 occupational areas in course lengths up to 78 weeks. During the year, there were close to 300,000 graduates from these courses. The cost of operating Lackland and Sheppard Air Force Bases and conducting this training in the State of Texas was approximately \$284,000,000.00).

The Texas Employment Commission reported a total Texas Civilian Labor Force in December 1969 of 4,643,100 June 1970 - 4,800,000 June 1971 - 4,869,400 June 1972 - 5,044,600 and June 1973 - 5,188,200.

The employment of professional personnel in Texas Public Schools, grades K-12, in 1968-69 was 128,387 while in 1972-73 the number was estimated to be 145,242. It is estimated that 146,755 professional personnel will be employed during the 1973-74 school year.

TABLE VI  
A SUMMARY OF SELECTED EDUCATIONAL FUNDING IN TEXAS

	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975
*Appropriations for Senior Colleges and Universities	\$ 317,155,046	401,321,594	391,324,172	472,590,121	504,489,576	619,021,259	621,641,164
#Fall Headcount Enrollment for Public Sr. Colleges & Universities	212,222	227,517	238,059	248,631	253,233		
Per Capita Expenditure of Appropriated Funds	\$ 1,494	1,764	1,644	1,901	1,992		
*Appropriations for Jr. Colleges - Academic	\$ 26,530,325	35,137,625	39,312,250	47,132,875	55,767,510	57,551,881	63,270,800
*Appropriations for Jr. Colleges - Occupational Education	\$ 7,376,000	10,463,095	11,331,811	18,062,253	21,139,507	37,160,645	41,239,264
TOTAL Appropriated Funds for Jr. Colleges	33,906,325	45,600,720	50,644,061	65,195,122	76,907,017	94,712,526	104,510,064
#Fall Headcount Enrollment for Public Jr. Colleges	86,913	96,524	102,441	151,552	166,308		
Per Capita Expenditure of Appropriated Funds	\$ 390	472	494	430	462		
%State General Revenue Funding for Secondary Voc. Programs	\$ -0-	-0-	-0-	692,832	-0-		
\$Federally Allocated Funds for Secondary Voc. Programs	\$ 8,881,595	19,176,414	22,246,927	24,804,315	21,556,530		
+Minimum Foundation Funds for Secondary Voc. Programs	\$ 31,942,833	39,249,646	55,103,415	63,559,600	70,266,400		
TOTAL State/Federal Funds for Secondary Voc. Programs	\$ 40,824,428	58,426,060	77,350,342	88,363,915	91,822,930		
@Vocational Education Enrollments at Secondary Level	245,064	267,426	304,845	333,828	352,563		
Per Capita Expenditure of State/Federal Funds for Sec.Voc.Prog.	\$ 167	218	254	265	260		
@State Average Current Cost Expend. per pupil for all pub.sch.students	\$ 504	556	642	690	773		

\*State and Federal Funding appropriated by State appropriations acts of the referenced fiscal years.

#Information obtained from the Coordinating Board, Texas Colleges and University System.

%State General Revenue Funds in this summary were applied against appropriations for Post Secondary Occupational Programs uniformly. However, in actual practice general revenue funds are used for secondary vocational programs.

\$For simplification of this summary, these figures were obtained by subtracting from the Federal Allocation of funds to Texas, Post Secondary Occupational appropriations that exceed general revenue, Other Adult Programs and 1/2 of funds Allocated for Area School Construction.

†Computed using TEA, Division of Finance Records of Vocational Units times Average salaries, plus \$660 Maintenance and Operation, plus \$400 for Materials beginning with Fiscal Year 1970, for each vocational unit.

@From published reports of the Texas Education Agency.

## ADVISORY COUNCIL RECOMMENDATIONS 1970-73

Recommendations have been made by the Advisory Council to the State Board for Vocational Education in the annual reports of 1970, 1971, 1972 and 1973. In this section of the Handbook, a summary is being made of the major provisions of the recommendations and action that has been taken on recommendations. The recommendations for 1973 are on pages 6-13 of the Fourth Annual Report and the recommendations as well as action taken for 1970, 1971 and 1973 are summarized on pages 53-106 of the fourth report.

The Council recommendations have been grouped under general topics of concern of the Council. The recommendations and accompanying rationale have been the result of the input from the varied backgrounds of Council members; meetings and briefings throughout the State; and contacts with over 10,000 citizens through two Governor's Conferences, fourteen Regional Hearings and twenty-eight Community Conferences. The Council has continuously reviewed a mass of data, studies and demonstration programs for further input.

The purpose in repeating these recommendations and action taken is to provide a brief documentation of the work of the Council and developments in technical, vocational and manpower education in the State, against which you and other citizens can react from personal experiences.

The Council is aware that its recommendations have implications beyond the field of technical-vocational education, which is its principal charge. However, all educational experiences are so interrelated that the Council is compelled to speak to all aspects of education as they relate to preparation for careers in order that all citizens can be productively employed to the end that they are economically independent and can make a meaningful contribution to society that is personally rewarding.

The Council expresses its appreciation to the State Board for Vocational Education and the Texas Education Agency Staff for their concern, cooperation, response and support of the concerns of the Council.

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### 1. REDIRECTION OF THE EDUCATION SYSTEM AND CAREER EDUCATION IMPLEMENTATION

Much of the rationale for this topic is contained in the section of this report entitled "It is Time for Action...The Evidence," on pages 5-6. For the last three years, the Council has supported career development activities that are summarized in the section of this report entitled "A Plan for Action...A Career Education Model," on pages 7-8.

The State Board of Education has responded in part to Council concerns under this topic. Some of these include:

- (1) Appointment of a 21-member Advisory Committee on Career Education to advise the Texas Education Agency staff in carrying out the redirection of education in the State.
- (2) Established Career Development as a priority action.
- (3) Included in General Philosophy of the State Board of Education (Policy 1201) the following: ".....In terms of their individual ability, all students should achieve: Occupational skills prerequisite to enter and advance in the economic system and/or academic preparation for acquisition of technical or professional skills through post-high school training....."
- (4) Publications and materials have been developed. Studies and demonstration programs have been supported.
- (5) Regional Education Service Centers have been supported in their services to local schools in Career Development activities.

In the 1973 recommendations, the Council has asked the State Board to develop a comprehensive State Plan for the orderly and coordinated development and implementation of the Career Education Concept in the Public Educational Institutions of the State and give priority to several items in support of this action.

## 2. SUPPLEMENTARY DELIVERY SYSTEM FOR EDUCATIONAL SERVICES

The Council has contended throughout its deliberations and recommendations that our citizens are individuals and that the education system must be flexible and responsive to the multitude of needs of the individual as a result of the continuous interaction of the ATTITUDE, APTITUDE, ABILITY and CIRCUMSTANCES of the individual. These individual needs must be coordinated with the needs of the society and economy to the end that the individual is prepared to be a useful and rewarding member of the society. To achieve this, the education institutions must provide comprehensiveness of programs. There are many barriers to such comprehensiveness. These include (1) population density, (2) distance one can and will travel, (3) capital outlay and duplication, (4) a multitude of barriers that include attitude, intellectual snobbery, complacency, etc.

Since 1965, area school designations have been given to 100 public schools and over 40 community colleges. Federally administered funds in the amount of \$50 million have been allocated to match local funds for capital outlay. Cooperative agreements have developed with neighboring schools. The Legislature has provided for: contracting between public institutions as well as with private institutions, increased levels of support, transportation, and other incentives. However, there are relatively few students that go from one campus or district to another for vocational training.

The Council has recommended the formation of jurisdictions in which all resources within the jurisdiction would participate to provide comprehensive offerings in keeping with the job market of the area, state and region. The jurisdiction would have taxing and program coordination responsibilities through a duly elected governing body. State funds should be made available for capital outlay as an incentive to local program development and in support of the orderly and effective economic development of the state. A number of guidelines were proposed for implementation of such a system. Legislation has been introduced in both the 62nd and 63rd sessions of the Legislature to implement these provisions, but has not been favorably considered.

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## 3. INFORMATION AND DATA SYSTEMS FOR PLANNING AND MANAGEMENT

A Labor Market Supply/Demand Information System was given Number 1 priority in the 1971 and 1972 recommendations of the Advisory Council. The effective planning and management of educational experiences that are related to the job market are dependent upon knowing what is required in the job market and this requirement should be directly related to the supply side. Substantial human and material resources have been and are being wasted because we do not have an effective supply/demand information system. Information from such a system should be a major factor in the allocation of resources for education.

The Council has asked that such a system include the following characteristics:

- (a) the system should be a continuing system with a stable base for collecting, analyzing and disseminating information;
- (b) the system should have visibility involving state and local agencies, groups and organizations, both in collecting and disseminating information;
- (c) the system should be responsive to the changes occurring in the society and economy. This will require continuous updating by use of surveys, projections and other collecting and analyzing activities in keeping with the actual needs in the society and economy;
- (d) the system should provide for technical assistance to users of the information;
- (e) the information should be retrievable in a variety of configurations for utilization by school districts, standard metropolitan statistical areas, counties, planning regions, and other similar divisions.

The Council asked that proprietary and public school enrollments in vocational-technical education, completions, placements by programs and grade level, follow-up of students for



five years for secondary, post-secondary and adult programs be gathered and made available to the supply aspect of the system.

The Council recommended that developments in tele-data communications systems be considered in the timely collection, analysis and dissemination of information in such a system.

A Tri-Agency Task Force was formed and began operation in May 1972 to design and develop a state supply/demand information system. The Texas Education Agency, Texas Employment Commission and the Governor's Office of Information Services have committed resources to this project. An evaluation is being planned for the work to date. The agencies involved are working within their present activities to identify data needed and to collect data needed but not now collected.

The need for a labor market supply/demand information system surfaces continuously in the work of groups in the broad Human Resources Development field. A request for funds for the system was made to the 63rd State Legislature but did not receive favorable consideration.

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#### 4. GUIDANCE SERVICES

Throughout the exposures of the Council in the State, Guidance Services usually surface as a great need in the education experiences of individuals. Guidance Services include a broad range of services, of which counseling is one, but a very important element. The Council has viewed the counselor as being the catalyst within the community and school system that gives direction to the multitude of resources in the school, home and community that will address the various needs of individuals. Guidance services will depend upon the design of education experiences of all individuals at all levels. The counselor must look for support from the curriculum, administration, faculty and the community; and services to the individual may be on a one-to-one or group basis, and counselors should make use of evaluations from teachers, tests and actual exposures through educational experiences.

The Council has made recommendations that include the following:

- (a) a statewide student follow-up system to guide meaningful changes in education experiences;
- (b) revision of allocation formulas to provide adequate counseling staffing at all levels of education experiences;
- (c) changes in counselor preparation and in-service education;
- (d) allocation of counselor units to local school districts who submit an acceptable plan for utilization of counselors;
- (e) expansion of guidance service personnel to include counselors, placement and follow-up personnel, specialists in labor market information, employer contacts and similar activities;
- (f) better coordination and leadership of guidance services at the state level;
- (g) action be taken to allocate \$200 per counselor unit for occupational counseling materials and development of lists at the state level of acceptable guidance services materials.

Substantial progress has been made in developing guidelines for counselor preparation, in-service activities, and the Council published material in October 1973 to assist in career development activities. However, much of the improvement rests with legislation to strengthen guidance services.

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#### 5. JOB DEVELOPMENT AND SUPPORT ASPECTS OF EDUCATION

The preparation of the individual means little unless he/she is provided with an opportunity to become meaningfully, productively and economically related to the economy and society. This means JOBS and education experiences that prepare people for these jobs.

JOB'S do not just happen. Job Development requires hard work in a very competitive situation between states and communities. It requires cooperation to utilize the total resources of the state and the communities of the state.

Recommendations of the Council in this critical area have included the following actions:

- (a) appropriation of discretionary funds to activate and supplement the various resources in the state for effective "start-up training;"
- (b) staffing and inter-agency relationships to facilitate job development;
- (c) maximum utilization of present resources in educational institutions;
- (d) development of a reservoir of equipment and materials for training.

The State Board of Education has funded a study, in cooperation with the Texas Industrial Commission, with Harper, Cotton and Little, Inc., to assess the needs of industrial "start-up training" and the resources available and needed to meet these identified needs. Some funds have been made available to Texas State Technical Institute for "start-up training." Several projects are being supported from existing resources. However, to effectively develop this phase of economic development in the state will require additional resources. A request was made to the 63rd State Legislature for funding, but appropriations were not made.

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## 6. ADULT EDUCATION AND SERVICES

Mobility in the work force for individuals is a critically important need. However, many adults have found themselves in "dead-end jobs" because of inadequate education and/or skill preparation. Prior to 1973 there was no state statute that gave local education institutions the responsibility for the education of adults. The efforts in this area prior to 1973 had been motivated by federally administered programs and local education leadership initiative. The administrative structure for support of adult education activities at the state and local levels were inadequate in many instances.

The Advisory Council has recommended and supported State Legislation and Appropriations for Adult Education. This action was supported by the State Board of Education and during the 63rd Legislature, this became a reality. Action is underway to implement the program.

The Council has recommended actions to remove numerous barriers to adults to avail themselves of educational opportunities. The Council has formed an Adult Education Committee to give special emphasis to the education of adults. A good start has been made, but all of us must work to fully develop educational opportunities for adults in the state in order that none are disenfranchised.

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## 7. PERSONNEL DEVELOPMENT

It is often and appropriately stated that "the teacher is the key in all educational experiences." The Council has continuously recommended actions that it hopes will enhance the development of educational personnel whether they be instructional or administrative. Some of the needs in this area have included the following:

- (a) establish a technical-vocational administrator internship program in Texas;
- (b) include the administration of technical-vocational education in the preparation programs of school administrators;
- (c) conduct regional seminars for educational leaders to emphasize the importance of technical-vocational education, manpower programs, labor market information and other factors and their influence upon education experiences;
- (d) develop consortium and other relationships between institutions of education at all levels to enhance preparation and in-service activities of professional personnel;

- (e) strengthen relationships between professional development and employers;
- (f) improve state leadership and coordination of professional development;
- (g) award tenure credit for pay purposes to teachers for non-teaching work experience that enhances their value in their teaching assignment;
- (h) utilize post-secondary institutional resources of preparation and in-service activities of instructional and administrative personnel;
- (i) initiate a study and review of the dichotomy between the credentialing of technical-vocational teachers at the secondary and post-secondary levels.

Some very meaningful developments have and are taking place in personnel development. Texas now has a doctoral program in vocational education. The State Board of Education adopted new policies on June 10, 1972, to strengthen the preparation of School Administrators as it relates to vocational education. Seminars referenced in (c) above were completed in October 1972. Consortium relationships are in various stages of development. A statewide advisory group has been established to implement exchanges between employers and educational institutions.

The Council believes that personnel development must receive a high priority and be on the "cutting edge" of all meaningful educational change. Much work remains to be done.

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### 8. POST-SECONDARY INSTITUTIONAL SUPPORT

The development of technical-vocational education at the post-secondary level has been very encouraging as can be determined by reviewing Chart III, page 13 and the accompanying rationale on page 9 of this report. Further evidence can be seen on pages 32-36 of this report in reviewing the growth in programs.

The following concerns of the Council have not been addressed satisfactorily:

- (a) discretionary funds for initial as well as the redirection of existing capital investment for high cost programs;
- (b) a uniform cost accounting system that displays all elements of cost in technical-vocational and occupational programs;
- (c) that line item appropriations for technical-vocational education to post-secondary institutions be earned at the formula rates for student contact hour reimbursement.

Post-secondary institutions have responded in a very meaningful way in most areas of the state in the last ten years and their usefulness to the well being of the community continues to develop.

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### 9. PUBLIC SCHOOL OCCUPATIONAL PROGRAMS

Public School Occupational Programs are those offered at the secondary levels as well as those related to adult skill development and upgrading of skills. The scope of development can be reviewed in Table II, page 12, Program Offerings Section, pages 32-36 and other information presented in this report.

The concerns of the Council in this area relate to several topics discussed elsewhere in the report. For example, Topic 2, Supplementary Delivery System for Educational Services is closely related to many problems in this topic. Reference is made to Table I, page 11 of this report that shows that 89.1% of the students are in 38.42% of the school districts of the state. This presents a very difficult question of how do you provide comprehensive-ness and availability to students of the state without a viable delivery system?

The Council has encouraged that a developmental and sequential approach be made to career development and vocational education resources be effectively related to this goal. That community resources be fully utilized. That flexibility of institutional policies make

resources available in accordance with individual needs. That bilingual programs be developed as needed in vocational education. That the special needs of handicapped and disadvantaged students receive the special attention of administrative and instructional personnel.

The relationship of public school occupational programs to the labor market is a continuing concern of the Council as addressed in other sections of this report.

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#### 10. UTILIZATION OF LOCAL ADVISORY COUNCILS/COMMITTEES

Throughout the exposure of the Council in the state, a major deficiency is the communication between the education community and community in general. The Council contends that local advisory councils/committees can strengthen these lines of communication.

The Council has recommended and the Texas Education Agency has responded with materials for use by local advisory councils/committees and the in-service education of ancillary personnel in the utilization of advisory groups. There are examples in the state of effective utilization of advisory groups. However, we have substantial opportunity for improvement in this area.

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#### 11. STATE PLAN FOR VOCATIONAL EDUCATION

Usually program administration is not better than planning. Consequently, the Council has addressed itself in all reports to this important matter. Some of the concerns include the following:

- (a) that U. S. Office of Education Guidelines for state plan development relate more effectively to a planning and management document;
- (b) that the state plan establish definite goals with identification of resources necessary to achieve such goals;
- (c) that the planning process better utilize local plans and broaden the base of input for planning;
- (d) that a brief popularized version of the State Plan be developed and receive broad dissemination.

Progress has been made in the planning process. However, many elements of the planning resource are not in place, for example, the supply/demand information system which should be the backbone of the planning mechanism. Also, other concerns of the Council have not been satisfied.

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#### 12. PROPRIETARY SCHOOLS

One of the early concerns of the Council was the effective regulation of proprietary schools of the state to render more effective this important technical-vocational education resource of the state. The Sixty-Second Legislature, with the support of the industry, State Board of Education, the Council and others, passed landmark legislation. This law was further amended by the Sixty-Third Legislature. The administration of the act by the Texas Education Agency is almost two years old and the regulations and procedures have been established and are working.

The principal remaining concern of the Council is the collection and reporting of information from proprietary institutions for the supply side of the labor market information system.

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### 13. TECHNICAL-VOCATIONAL EDUCATION CURRICULUM AND MATERIALS SYSTEM

The state has had for several years curriculum and materials centers that address themselves to needs of occupational areas principally at the secondary level. The Council believes these very valuable resources should be expanded to serve all occupational areas at all levels and that these efforts receive state leadership and coordination. Action was taken by the State Board of Education on July 8, 1972 to establish a mechanism for coordination. However, action taken by the U. S. Office of Education in establishing Regional Centers has delayed the state coordination in order to effectively relate state and regional activities. A continuing concern of the Council in this area is the adequate funding of this important element of effective instructional programs.

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### 14. FINANCING OF TECHNICAL-VOCATIONAL EDUCATION IN TEXAS

This topic is included as Recommendation II, page 8 of the Fourth Annual Report of the Council. The Council has addressed itself to many aspects of this subject in all reports. However, in view of the deliberations being made by numerous groups in the state on the subject of "Public School Finance" the Council believes its thoughts should be known on some specifics on the subject.

The Council recommendation included the following:

That the State Board of Education continue its support of the present system of financing vocational education to include:

- (a) the allocation of bonus vocational units in accordance with policies established by the Board under the Foundation School Program;
- (b) continuation of the \$400 per vocational unit for materials and supplies; average daily attendance credit to remain with the sending school for students attending another district for vocational offerings; transportation of vocational students between campuses and districts; and vocational units be counted as teacher units in allocating to the local school district the amount provided for maintenance and operation.

That the State Board of Education support the inclusion of vocational unit travel financing under the Foundation School Program.

An unresolved issue in financing of technical-vocational education is whether tradition will be broken and the state will provide capital outlay for local facilities for technical-vocational education as a justifiable state investment in the economic development of the state. Since 1965 approximately \$50 million of federally administered funds have been used for matching local funding for this purpose. However, this source of funding has dried up.

The Council has asked the State Board in the Fourth Annual Report to address itself to the program and funding needs of technical-vocational education in the state to support additional resources to correct the present inadequate level of funding. Even though rather dramatic increases have been made in the level of funding in recent years, there is a rather drastic imbalance in levels of funding of technical-vocational education when compared to needs in the job market.

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### 15. SERVING THE NEEDS OF SPECIAL GROUPS

The Council has addressed itself to these special needs on numerous occasions and in recommendations of the three previous reports. However, it is believed that these special needs need the special attention of the State Board of Education and this attention is recommended in Recommendation III, page 9 of the Fourth Annual Report. The recommendation is as follows:

That the technical-vocational education programs at the secondary and post-secondary levels receive a special review and evaluation to determine if the special needs of the following groups are adequately served in preparation for occupations:

- (a) handicapped persons.
- (b) disadvantaged persons
- (c) veterans groups
- (d) bilingual and cultural individuals
- (3) ethnic minorities and women.

When the education system has become flexible and responsive to the needs of the individual as a result of the many directions brought about by the interaction of the factors of APTITUDE, ABILITY, INTEREST and CIRCUMSTANCE, then it will probably not be necessary to give special attention to special needs of individuals.

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#### 16. PUBLIC AWARENESS OF THE NEEDS AND RESOURCES IN TECHNICAL-VOCATIONAL EDUCATION IN TEXAS

Another area of concern to the Council is that expressed in the title of this topic. A study conducted by the Advisory Council during 1973 indicated the need for: (a) more public information materials, (b) better dissemination and coordination of information, (c) leadership and follow-up in the area of public awareness with regard to technical-vocational needs and resources. This concern is expressed in Recommendation V, page 11 of the Fourth Annual Report.

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#### 17. THE ADMINISTRATION OF TECHNICAL-VOCATIONAL EDUCATION IN TEXAS

In the rationale of Recommendation VI, page 12, Fourth Annual Report, the Council has identified some of the numerous changes that have occurred in the state during the last ten years that would warrant a comprehensive review of this important area by the State Board of Education. In the opinion of the Council, the many changes referenced have caused a fragmentation of the administrative structure and delivery system and created substantial competition for limited resources with which to meet the rapidly growing demand for preparing people for jobs in a rapidly developing and changing economy.

Some of the changes discussed in the above referenced rationale include:

- (a) growth and development of programs at secondary and post-secondary levels;
- (b) establishment of the Coordinating Board, Texas College and University System (1965) and expansion of existing post-secondary institutions and establishment of many new ones;
- (c) several significant pieces of state and federal legislation;
- (d) development of ancillary personnel at local levels;
- (e) establishment of regional education service centers and a multitude of other factors that influence the effectiveness of the administrative structure.



## RESPONSIBILITY OF THE ADVISORY COUNCIL UNDER STATE STATUTE

The Advisory Council for Technical-Vocational Education in Texas was formed administratively in early 1969 under Public Law 90-576 and held its first meeting on March 4, 1969. The Technical-Vocational Act of 1969 was passed by the State Legislature and signed by the Governor on April 22, 1969. The Council was reconstituted under the provisions of the state statute on September 1, 1969. The state statute incorporated the provisions of the federal act as it related to the State Advisory Council on Vocational Education. The general purpose of the Council is quoted on the bottom of the Council letterhead. The Council is responsible for evaluating, planning and making recommendations regarding technical, vocational and manpower education. The Council makes recommendations to the State Board for Vocational Education, and these are usually included in the Annual Report which is transmitted to the U. S. Commissioner of Education and the Chairman of the National Advisory Council on Vocational Education. The Council makes an annual report to the Governor and a Biennial Report to the State Legislature.

The state statute has been codified as Chapter 31, Texas Education Code. The membership categories as outlined in state statute are quoted along with the name and address of the Council members on the inside covers of this report. The twenty-one members of the Council are recommended by the Governor, appointed by the State Board of Education and confirmed by the State Senate for six-year staggered terms. The Council members serve without compensation, but are reimbursed for actual expenses.

The state statute directs in Section 31.36 that "The Texas Education Agency; the Coordinating Board, Texas College and University System; the Texas Employment Commission; and all other state boards and agencies are directed to cooperate with the Advisory Council and to supply such information and material as requested by the Council." The agencies cited above, other state agencies, groups, schools and the public in general have been most cooperative in assisting the Council in fulfilling its responsibilities.

In Section 31.33, the Council has been given fourteen rather specific responsibilities. These will be listed as follows with a brief report on action that has been taken to fulfill these responsibilities. There is strong correlation between the responsibilities outlined in state statute and the topics developed by the Council in expressing concerns to the State Board of Education. Frequent references will be made to that section of this report, as well as to previous reports of the Council.

### Texas Education Code - Section 31.33(1)

*Recommend and evaluate the role and scope of secondary institutions, public junior colleges, community colleges, technical training institutes, and public senior colleges and universities in a comprehensive plan for developing manpower education and training in the State of Texas;*

In America in the last century we have developed what has been referred to as the "degree syndrome," believing that the capstone of all educational experiences is the degree. We have developed an "education for education's sake" attitude. This attitude has unduly influenced public education programs at the elementary and secondary levels, resulting in a majority of our citizens being labeled as "failures," "dropouts," "pushouts," etc. These labels for the most part are erroneous as describing these individuals. In our zeal, many citizens were disenfranchised because they did not fit the "mould" that education was the panacea.

The Council has devoted a substantial part of its time and resources toward redirecting the education system. See Topic 1, page 17 of this report and referenced sections.

On November 2, 1972, the Steering Committee of the Council held a public hearing on the Role and Scope of Institutions in the state. A summary of this hearing is on page 18 of the Second Biennial Report to the Legislature (December 1972). A detailed report of the proceedings of the hearing is available from the Council office.

Dr. Bevington Reed, Commissioner of Higher Education, offered observations that included the following:

- (a) Role - refers to the levels and kinds of offerings  
Scope - refers to the extent or range of offerings
- (b) Community colleges should be comprehensive, open door institutions with particular responsiveness to needs of the communities they serve.
- (c) Regional state universities that serve regions without a community college can serve some needs of the local area.
- (d) The state has not committed itself to community services and remediation. Community colleges are particularly adapted to these services because of a local tax base.
- (e) Role and scope decisions should insure linkages between institutions of various levels to effect maximum coordination and minimum of duplication.
- (f) Programs of institutions should provide opportunities for mobility within the field of study.

The Council addressed further issues in this area of responsibility on pages 18-19 of the above referenced report, and identified several developments in state legislation that influence the role and scope of all institutions.

The Advisory Council has not fully addressed itself to "a comprehensive plan for developing manpower education and training in the State of Texas." It has dealt with various elements of the comprehensive plan, many of which are "first steps" in the rather complex task outlined in Section 31.33(1) above.

A study is being conducted by the Coordinating Board with regard to the needs for post-secondary institutions in the state. In October 1973 the Chairman of the Texas Employment Commission presented to the Governor a report entitled "The New Focus on Man and His Work... A Proposed Comprehensive Manpower Policy for Texas." Both of these studies along with other studies and work of the Council should provide adequate basis for more definitely relating the role and scope of post-secondary institutions to the state plan for manpower and education.

#### Section 31.33(2)

*Recommend the appropriate subjects to be taught at each level of training and in each of the above types of institutions;*

It is believed that the fulfillment of this responsibility will depend in large part upon the implementation of a "labor market supply/demand information system" in order to alleviate instances of duplication of resources and over/under training for the job market.

The development and modification of subjects or programs in technical-vocational education is a continuous process, resting clearly with the local institutional administrator as influenced by statewide information and policies.

In partial fulfillment of this responsibility, Section 31.71(d) of this statute requires the Associate Commissioner for Occupational Education and Technology to publish annually, "...a certified list of courses for which funds may be made available in accordance with the appropriations of the Legislature." This responsibility has been fulfilled annually.

#### Section 31.33(3)

*Recommend a state plan designating the method and the criteria to be utilized in establishing area technical schools which will be consistent with the Vocational Educational Act of 1963, as amended, the Manpower Development and Training Act of 1962, as amended, and other federal statutes;*

The Council has addressed itself to this responsibility continuously since its formation in 1969. A summary of recommendations made on the subject can be found under Topic 2, "Supplementary Delivery System for Educational Services," pages 60-63 of the Fourth Annual Report and a shorter summary under the same topic on page 18 of this report.

The resolution of this responsibility seems to rest with an acceptable solution of the following points:

- (a) Formation of jurisdictions that would involve a new taxing and governing authority;
- (b) State supported incentive for the economic development of the state and such would involve state administered funds for capital outlay and possibly further support of operation of programs; and
- (c) Acceptance on the part of leadership of all resources within a jurisdiction the overall coordination and direction of programs to achieve maximum availability and comprehensiveness.

The fact that proposals incorporating the above points have been presented to both the 62nd and 63rd Legislatures and they have not been accepted indicates that the proposals have not been adequately developed. Consequently, the Council will continue to review and study such a delivery system in order that this critical responsibility can be met.

#### Section 31.33(4)

*Recommend and evaluate a list of courses offered by these types of institutions eligible to be funded by the Legislature or through the allocation of federal funds. These courses shall be freely transferable among the public institutions in the State of Texas, with credit for such courses to be given on the same basis as if they had been taken at the receiving institutions;*

The first part of the responsibility is delegated to the Associate Commissioner for Occupational Education and Technology in Section 31.71(d), Texas Education Code and is being carried out.

The second part of this responsibility has received substantial response on pages 24-25 of the Second Biennial Report to the Legislature (December 1972), and some of the points will be summarized and supplemented as follows:

- (a) the term "freely transferable" is interpreted to mean a common body of knowledge relating to or directed toward a single objective;
- (b) the course(s) may have been supplemented by previous educational experiences or on-the-job experiences;
- (c) validation testing for advanced standing is another method of evaluation.

In recent months, Texas has joined a consortium of states to develop "performance based objectives" and "criterion referenced measurements" in the area of technical-vocational education utilizing models developed in several states and by the U. S. Air Force. The consortium is under the general direction of the Southern Association of Colleges and Schools with an Executive Director of the consortium. Consequently, the movement is away from "courses" as such, toward the achievement of well identified performance objectives, with the evaluation resting with the individual's ability to perform the prescribed objectives of the course. This movement is surfacing in numerous forms at all levels and in numerous education and training situations.

In 1973 several senior colleges and universities in the state have developed what is sometimes called "inverted degree" plans. This means that the senior institution will accept in "block" up to approximately 60 semester hours of work done in technical fields as satisfying the "major" requirements for a degree. The individual then takes what is generally referred to as "general studies" - normally taken during the freshman and sophomore years - during his junior and senior years.

These examples indicate some rather unique developments in this important area, but the Council will continue to work for further meaningful developments to the end that a very minimum of duplication and waste of resources occurs in our education experiences of individuals.

#### Section 31.33(5)

*Recommend to the Governor and the Legislature methods of funding existing programs and propose*

*methods for funding new programs;*

Reference is made to Topic 14, "Financing of Technical-Vocational Education in Texas," page 23 of this report for current concerns of the Council on this subject and to page 26 of the Second Biennial Report to the Legislature for some further and long range concerns of financing needs.

Few subjects have received as much attention in Texas in recent months as Public School Financing. The issue will probably not receive full consideration of the State Legislature until the 64th Regular Session of the Legislature. Consequently, the Council will continue to review developments and relate these to funding of technical-vocational education in the state and be prepared to respond to situations that arise from such developments.

#### Section 31.33(6)

*Suggest and evaluate pilot projects and present recommendations to the Governor and the Legislature for implementing cooperative programs among the several types of institutions named hereinabove, which will provide a more effective and efficient method of supplying business and industry with trained manpower;*

The responsibilities outlined in this section are very broad and the Council has addressed itself to the major aspects of this responsibility in the recommendations of the Council. These recommendations and action taken are summarized under the seventeen topics on pages 17-24 of this report or in more detail in Part III, pages 53-106 of the Fourth Annual Report. The ultimate goal of technical-vocational education is supplying business and industry with trained manpower.

To do the most effective job will require continuous evaluation of programs and subsequent recommendations. Numerous studies and projects are in Part II, pages 14-33 of the Fourth Annual Report. Specific attention is directed to "Research Projects Expenditures of Vocational Education" on pages 30-31 of the referenced report. This study summarizes research, pilot projects and exemplary activities in the state from 1967 to 1974. As pointed out in the rationale of the study, there is substantial duplication of efforts and some activities could be more closely related to state objectives and priorities. The study further identifies the need for more effective dissemination of these activities and follow-up.

The Council will continue its review of these activities and others to ascertain the effective utilization of resources committed to this important area.

#### Section 31.33(7)

*Recommend the establishment of the responsibility of public schools, public junior colleges, community colleges, technical training institutes, and public senior colleges and universities in adult basic education, adult technical education, and adult vocational education;*

Special reference is made to Topic 6, Adult Education Services, page 20 of this report and to the same topic in the Fourth Annual Report on pages 75-78 and further attention to Table III, page 41 and rationale on pages 34-35 for detailed information on this responsibility.

The Council during 1973 formed an Adult Education Committee to give special emphasis to all phases of adult education in the state and offered its services to the State Board of Education to serve as the Adult Education Advisory Council in Texas as prescribed in HB 147, 63rd Legislature.

The State Plan for Adult Education has been approved by the State Board of Education and work has begun on development of regional service areas for adult education services. The prime sponsors of such services are about equally divided between local schools, community colleges and education service centers. The total number of plans in the state will be between 55 and 60. When the impact of the new legislation and appropriation has been assessed, recommendations will be made concerning further needs.

#### Section 31.33(8)

*Recommend, encourage, and evaluate cooperative programs between educational institutions and*

*industry, and with the assistance of industry, assist in the development of new curricula and instructional materials as may be required for new and emerging occupational categories as may be prescribed by industry;*

The Council is convinced that one of the most effective mechanisms for cooperation and communication between education and industry is local advisory councils/committees. Topic 10, "Utilization of Local Advisory Councils/Committees" on page 22 of this report and same topic on pages 99-100 of the Fourth Annual Report will summarize some of the activities of the Council in this area of concern. Also, page 29, Second Biennial Report to the Legislature outlines some examples of education/industry cooperation.

Industry representatives are utilized in the curriculum and materials centers presently in operation in the state. However, as outlined in Topic 13, page 23 of this report, this area of cooperation can be expanded. As referenced in Topic 7, "Personnel Development" page 20 of this report a statewide advisory committee has been established to develop exchanges between professional personnel and industry.

Industry will be involved in the Consortium of States, Southern Association of Schools and Colleges, Technical-Vocational Education in the validation of job performance objectives and criterion referenced evaluation.

Even though many exciting things are happening in education/industry cooperation, there are many opportunities to further develop lines of communication and cooperation and the Council will continue its efforts to develop these.

#### Section 31.33(9)

*Provide up-to-date statistical data on employment opportunities in the Texas economy to persons trained in these institutions through cooperation with the Texas Employment Commission and other appropriate research agencies at both the state and national levels;*

Reference is made to Topic 3, "Information and Data Systems for Planning and Management," page 18 this report and pages 64-66 of the Fourth Annual Report for recommendations, actions, and statements on this topic. The labor market supply/demand information system is essential to meaningful planning and management of education resources.

The Council has spoken to the need for drastic improvement of Guidance Services at all levels in the state. In the Fourth Annual Report, page 10, the Council recommends that a special allotment of \$200 per counselor be provided for purchase of occupational counseling materials to include Dictionary of Occupational Titles, Standard Industry Classification Manual, Occupational Outlook materials from the Texas Employment Commission and U. S. Department of Labor.

The Council has supported the Texas Guidance Information Program initiated by the Texas Education Agency and encouraged that the material be widely disseminated for use by high school students planning further training in post-secondary technical-vocational programs. See page 14, Fourth Annual Report.

To assist counselors and students in the Career Development Activities, the Council published in October 1973 a Career Development Handbook---"Up Close, and Personal." The handbook promises to be very useful in providing meaningful information for students.

Other efforts are underway to further carry out the responsibility in this section. It is an ongoing responsibility that will require continuous effort.

#### Section 31.33(10)

*Recommend a state plan for the development of a comprehensive manpower program in conjunction with the Manpower Development and Training Act of 1962, as amended;*

This responsibility in this section is far-reaching and the Council has not addressed this responsibility in its entirety. Substantial work and effort has been given to what the Council believes to be the "component" parts of a comprehensive manpower program. A brief

review of these elements would be helpful at this point.

- (a) The first and basic consideration of the Council was the "redirection" of the education system to develop a balance in the efforts to prepare individuals for "living and making a living." Progress has been made, but much remains to be done. Reference Topic 1, "Redirection of the Education System and Career Education Implementation" Fourth Annual Report, pages 55-59 and page 17 of this report.
- (b) There must be a delivery system that makes comprehensive offerings available to the citizens of the state on a cost effective basis. See Topic 2, "Supplementary Delivery System for Education Services" Fourth Annual Report, pages 60-63 and page 18 of this report.
- (c) The operation of any comprehensive manpower program will depend upon labor market supply/demand information and other similar information. This must be coupled to realistic Guidance Services that provide follow-up of students that influence the kind of education experiences the individual gets in relationship to jobs available. Reference Topics 3 and 4, pages 64-66 and 67-70 of the Fourth Annual Report and pages 18 and 19 of this report.
- (d) Job development must be a part of the manpower program and attention is called to Topic 5, pages 71-74 of the Fourth Annual Report and page 19 of this report.
- (e) Adult education services is discussed in Topic 6, pages 75-78 of the Fourth Annual Report and page 20 of this report.
- (f) Proprietary schools are discussed in Topic 12, page 104 of the Fourth Annual Report and page 22 of this report.
- (g) The remaining topics are important to the development of a comprehensive manpower program, however, the preceding seem to be the most basic and urgent changes needed.

It is hoped the Council can effectively relate the "component" parts that generally fall in the category of the supply side of the manpower program and relate these component parts to those of other agencies and groups in the state to more economically and efficiently serve the citizens of the state.

The report entitled "The New Focus on Man and Work...A Proposed Comprehensive Manpower Policy for Texas" as presented to the Governor in October 1973 by the Chairman of the Texas Employment Commission, his staff, other state agencies and groups and a Statewide Advisory Commission will be helpful in giving guidance to fulfilling the responsibilities of the Council under this section.

#### Section 31.33(11)

*Recommend the state plan, training institutions, and means of coordination of manpower training as provided in the Manpower Development and Training Act of 1962, as amended; and*

The response of the Council under Section 31.33(10) and other sections of this report and the Fourth Annual Report, outlines the activities to achieve this responsibility.

#### Section 31.33(12)

*Recommend research projects as may be necessary to implement and improve a statewide system of technical, vocational, and manpower training from funds provided by appropriations from the United States Congress or private gifts, grants or awards;*

Reference is made to the Fourth Annual Report, Part II, pages 14-33 for a review of much of the research being done in technical-vocational education in the state and studies and surveys that are in the planning or development stage.

The Council will continue to review the needs in this area and recommend research projects to carry out the responsibilities outlined in this section.

#### Section 31.33(13)

*Recommend and evaluate a program of teacher certification for instructors of occupational training courses;*



Reference is made to Topic 7, "Personnel Development," pages 79-85 of the Fourth Annual Report and page 20 of this report for a review of activities of the Council in this area of responsibility. Further reference is made to page 34 of the Second Biennial Report to the Legislature for a review of activities of the Council.

Section 31.33(14)

*Recommend and evaluate a statewide plan for the development of a comprehensive program of apprenticeship training.*

Reference is made to the "Apprenticeship Training Study" on page 29 of the Fourth Annual Report for background activity regarding related instruction, cost and action taken by the State Board of Education and the Council in this important area of training.

The Advisory Council has formed an Apprenticeship Committee within the Council and the Chairman of the Council Committee is a member of the State Apprenticeship Advisory Committee which was appointed by the State Board of Education during its March 10, 1973 meeting. A recent appointee to the Council membership has served on the Apprenticeship Advisory Committee since its formation.

During 1973 several meaningful actions have been taken and further action is anticipated that will give apprenticeship training its rightful place in the total manpower plan of the state. The Council will continue its attention to this element of training.

**TECHNICAL-VOCATIONAL PROGRAM OFFERINGS IN PUBLIC SECONDARY AND POST-SECONDARY  
INSTITUTIONS IN TEXAS 1964-65, 1972-73, AND 1973-74**

PROGRAM TITLES

	SECONDARY			POST-SECONDARY		
	64-65	72-73	73-74	64-65	72-73	73-74
<b>AGRICULTURE</b>						
Production only	1,158	798	742			
Production-Coop Combination	0	310	336			
Cooperative and Pre-Employment and Feedlot Combination	0	3	7			
Ornamental Horticulture Combination		1				
Cooperative only	0	8	13			
Pre-Employment Laboratory "Only"						
A. Horticulture	0	3	4			
B. Farm Power and Machinery	0	1	1			
Pre-Employment Laboratory-Comb.	0	153	223			
Agri-Business Technology	0			1		2
Agri-Chemical Technology	0	(3)	(1)	1		1
Animal Medical Technology				2		2
Agricultural Resources	0	(9)	(10)			
Farm and Ranch Management				12		17
Farm Equipment Mechanics						
Farm Machinery Mechanics				2		2
Farm Power & Machinery	0	(75)	(87)			
Feed Mill Operation						2
Feedlot Employment	0	(17)	(16)			
Floriculture and Ornamental Horticulture	0	(27)	(35)	3		4
Forest Products Harvesting	0	(21)	(19)			
General Agricultural Mechanics			(45)			
Ginning				1		1
Irrigation Technology						1
Livestock and Ranch Operation						
Meat Processing & Marketing	0	(7)	(10)	2		2
Seed Processing Technology						1
CVAE	1	44	52			
Handicapped		2	4			
( ) Figures indicate a breakout of the Pre-Employment Laboratory Combination						
<b>HOMEMAKING</b>						
Homemaking Education	1,755	2,138	2,163			
Comb. Homemaking & Coop Education	0	140	195			
Cooperative Education	0	108	145			
Comb. Homemaking and Pre-Employment Laboratory		13	12			
Pre-Employment Laboratory		36	41			
Pre-Employment Laboratory & Coop Combination	0	2	4			
Alteration Seamstress				1		1
Child Care or Child Development				5		8
Dietitian Aide				2		2
Adult				4		
Home Economics						
Fashion Design				2		2
Food Service, Dietetic Tech.						

PROGRAM TITLES

	SECONDARY			POST-SECONDARY		
	64-65	72-73	73-74	64-65	72-73	73-74
<b>HOMEMAKING (CONT'D)</b>						
Food Service, Operation						
Interior Design				3		3
CVAE		162	176			
Handicapped		17	21			
<b>DISTRIBUTIVE EDUCATION</b>						
Cooperative	227	432	445			
Coop-Pre-Employment Lab. Comb.	0	108	141			
Pre-Employment Laboratory	0	12	12			
Aviation Management				2		1
Commercial Transportation				3		3
Fashion Merchandising Management				3		4
Food Marketing Management				3		3
Food Service Management				5		1
General Business Management						
Industrial Management				1		
Mid-Management				32		35
Office Management						
Petroleum Marketing Management				1		
Real Estate				2		6
Restaurant Management				5		5
Retail Management						
Sales Management						
Adult Distributive Education				4		
Banking						9
Recreation Leadership					1	3
<b>OFFICE OCCUPATIONS</b>						
*Office Occupations				1		
Cooperative	**	169	172		1	1
Combination Coop-Pre-Employment	**	136	165			
Pre-Employment Laboratory	**	142	157			
Data Processing	**	48	45	19	40	39
Accounting and Computing					11	15
Business Management						3
Computer and Console Operator					4	5
1 Year Clerical						5
1 Year General Business					4	
2 Year General Business					3	3
1 Year Secretarial					38]	
2 Year Secretarial					9]	36
Specialized Secretarial					9	11
CVAE	0	71	84			
Handicapped		2	3			
*Counted as technical in 1964-65						
**Did not have Vocational Office Education						
<b>HEALTH OCCUPATIONS</b>						
Cooperative		56	73			
Pre-Employment Laboratory		3	8			

## PROGRAM TITLES

	SECONDARY			POST-SECONDARY		
	64-65	72-73	73-74	64-65	72-73	73-74
HEALTH OCCUPATIONS (CONT'D)						
Combination		6	6			
Associate Degree Nursing					20	22
Central Service Technician					1	
Dental Assistant				2	9	11
Dental Hygiene					8	9
Dental Laboratory Technician					2	2
Emergency Medical Technician						
Environmental Health Technician					2	2
Health Care Management					1	1
Inhalation Therapy Technology					9	11
Licensed Vocational Nursing				15	32	35
Medical Assistant					3	4
Medical Laboratory Technician					9	11
Medical Technology					1	
Mental Health & Mental Retardation Assistant					1	4
Mental Health Assistant					1	3
Nurse Aide					5	8
Nursing Home Administration					1	2
Occupation Therapy Assistant					2	3
Operating Room Technology					4	5
Physical Therapy Assistant					1	3
Radiologist Technology					12	13
Respiratory Therapy Technician					1	2
Ward Clerk				1	1	1
INDUSTRIAL EDUCATION						
Industrial Cooperative Training	103	257	287		1	
Environmental Technology	0	13	13			
Occupational Orientation	0	69	89			
CVAE	0	380	420			
CVAE Coop (Not affiliated with one particular occupational field)	0	113	151			
Handicapped		30	31			
Aeronautical Technology						
Refrigeration and Air Conditioning	7	30	35	3	27	30
Airframe Mech.-FAA Exam. Review Course					6	
Airframe & Powerplant Tech.	2	7	6		3	3
Air Traffic Control					1	1
Appliance Service & Repair	1	12	15		3	6
Auto Body Repair	11	47	54		10	13
Auto Parts Specialist					1	1
Auto Mechanics	104	255	276	5	33	36
Automatic Merchandising Service Specialist						
Automatic Photograph & Game Specialist						
Automotive Technology						
Building Construction Craftsman	50	142	168		4	
Combination Welding (Underwater)					8	1
Commercial Art	8	17	18		5	7
Cleaning and Pressing	2	1	1			

## PROGRAM TITLES

	SECONDARY			POST-SECONDARY		
	64-65	72-73	73-74	64-65	72-73	73-74
<b>INDUSTRIAL EDUCATION (CONT'D)</b>						
Commercial Cooking	5	4	4			
Culinary Arts				1		1
Commercial Photography	6	9	9	6		5
Cosmetology	44	140	157	8		14
Construction Equipment Mechanics				2		2
Construction and Maintenance Trades				4		7
Diesel Mechanics	0	2	2	5	11	12
Drafting	10	57	61		3	4
Electrical Trades	12	33	37	3	2	1
Electronics	6					
Industrial Electronics		14	14		3	4
Vocational Electronics		5	5			
Fire Protection and Safety					11	14
Heavy Construction Equipment Mech.		1	1		2	1
Horology				1	4	4
Industrial Engines	0	2	1	1		
Industrial Media Technology			3			
Jewelry Craft					1	1
Law Enforcement & Police						
Administration					39	42
Leather Trades	1	2	2			
Machine Shop	2	22	21	2	18	20
Machine Tools						
Machinist Trades						
Masonry	0	10	12		2	1
Metal Trades	40	52	57			
Mill and Cabinet	7	9	9			
Mortuary Science				1	1	1
Multi Occupation Cooperative			5			
Needle Trades	6	7	7			
Out-of-School Cooperative Program		5	13			
Pattern Drafting, Draping & Grading					1	1
Piping Trades	2	11	13			
Plumbing					1	1
Printing	13	30	34		12	14
Radio & TV Repair	27	53	60	2	18	19
Sewing Machine Mechanic						1
Small Engine Repair	0	6	6			1
Sheet Metal	2	4	4			
Technical Communications					3	3
Upholstery	0	3	3		3	4
Vending Machine Repair						1
Vocational Plastics	0	1	1			
Water Utility Operator					1	1
Welding	6	35	38	6	28	32
Office Machine Repair						1
<b>TECHNICAL EDUCATION</b>						
Air Pollution Control Technology				2		3
Architectural Drafting				3		2
Aviation Technology				1		

## PROGRAM TITLES

	SECONDARY			POST-SECONDARY		
	64-65	72-73	73-74	64-65	72-73	73-74
TECHNICAL EDUCATION (CONT'D)						
Avionics				2		2
Biomedical Equipment Technology				1		1
Building Materials Technology & Marketing					2	3
Chemical Technology	1			5		5
Civil and Highway Technology				3		3
Career Pilot Technology				9		8
Construction Technology				4		4
Drafting and Design Technology	10			38		42
Electrical Power Dist. Tech.				2		2
Electrical Technology	1			2		3
Electro-Mechanical Technology				4		4
Electronics	9			29		34
Environmental Control				1		1
Fluid Power Technology				1		1
Instrumentation Technology	3			7		7
Laser Electro-Optics Technology				1		1
Library Assistant Technician				6		6
Mechanical Design & Production				1		1
Oceanography (Marine Science)				2		2
Oil and Gas Technology	2			1		4
Petroleum and Chemical Process	1			2		1
Photographic Technology				6		
Plastics Technology				2		
Quality Control Technology				1		1
Radio & TV Production (Telecommunications)				5		5
Refrigeration and Air Cond. Tech.	3					
Scientific Data Processing				2		2
Surveying Technology	1			2		2
Industrial Management	1			1		2
Technical Illustration				3		2
Water Utilities Technology				2		1
Welding Technology						

(continued from inside front cover)

...person representative of those school systems with large concentrations of academically, socially, economically, or culturally disadvantaged students.

VACANT

...person having special knowledge, experience or qualifications with respect to the locally administered manpower programs sponsored by organizations having voting representatives of the socioeconomically disadvantaged in their policy making bodies.

Mrs. Gwendolyn M. Foster  
Executive Director  
Dallas Opportunities Industrialization  
Center, Inc.  
3315 Elm Street  
Dallas, Texas 75226

...representing a cross section of industrial, business, professional, agricultural, and health service occupations.

Mr. Roff W. Hardy, President  
West Texas Utilities Company  
P. O. Box 841  
Abilene, Texas 79604

...person familiar with the administration of state and local technical-vocational education programs.

Mr. Robert M. McAbee  
Associate Assistant Superintendent  
for Vocational Education  
Fort Worth Public Schools  
3210 West Lancaster Street  
Fort Worth, Texas 76107

...person familiar with post-secondary baccalaureate technological degree programs.

Dr. Hugh E. McCallick, Dean  
College of Technology  
University of Houston  
Houston, Texas 77004

...representing State Industrial and Economic Development Agencies.

Mr. Vernon A. McGee  
Executive Vice President  
Management Services Associates  
P. O. Box 3750  
Austin, Texas 78764

...person actively engaged in the administration of community or junior college vocational-technical education.

Dr. Luis M. Morton, Jr., President  
Central Texas College  
Killeen, Texas 76541

...person familiar with the vocational needs and problems of management in the State.

Mr. E. D. Redding, Vice President  
Brown & Root, Inc.  
P. O. Box 3  
Houston, Texas 77001

...person having special knowledge, experience or qualifications with respect to the special educational needs of the physically or mentally handicapped persons.

Mrs. Dorothy R. Robinson  
Teaching Principal  
Rusk Primary School  
Palestine, Texas 75801

...person representative of Comprehensive Area Manpower Planning Systems of the State.

Mr. W. H. (Harrell) Townsend  
Chief of Special Programs  
Texas Employment Commission  
Austin, Texas 78778



**The Advisory Council  
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