

DOCUMENT RESUME

ED 415 360

CE 075 523

TITLE Recommended High School Programs of Study for College Preparation and Broad Career Concentrations. A Report Submitted to the Governor, Lieutenant Governor, and Speaker of the House, and the Seventy-Fifth Texas Legislature.

INSTITUTION Texas Education Agency, Austin.

REPORT NO GE7-302-01

PUB DATE 1997-01-00

NOTE 19p.

PUB TYPE Guides - Non-Classroom (055)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Agricultural Occupations; Art; Business Education; Career Choice; Career Education; Career Planning; \*Careers; College Bound Students; Communications; Criminology; \*Education Work Relationship; Engineering Technology; \*High Schools; Higher Education; Individual Development; Industry; Marketing; Mass Media; Medical Services; Natural Resources; \*Occupational Clusters; Personnel Management; State Programs; \*Statewide Planning; Technology

IDENTIFIERS \*Texas

ABSTRACT

A study explored the use of career concentration areas in Texas school systems and recommended broad career concentration areas. Of the 40 largest school districts, 35 responded to the survey. Approximately 58 percent currently use variations of the career concentration area concept to help students prepare for working life. Respondents recommended by a margin of more than 2-to-1 that the Public Education Information Management System be used to collect data related to career concentrations. The commissioner of education reviewed three alternatives for the legislature's consideration: (1) adopt the seven career concentration areas identified by the Texas Education Agency (TEA); (2) adopt the eight career concentration areas recommended by the State Occupational Information Coordinating Committee; and (3) adopt the four career concentration areas proposed in the Texas Workforce Commission's grant proposal for federal funds under the School-to-Work Opportunities Act. Adoption of the first alternative was recommended. School districts throughout the state adopted the following seven TEA career concentrations: agricultural science and natural resources; art, communications, and media technology; business and marketing; health science technology; human development, management, and services; industrial and engineering technology; and personal and protective services. Materials developed around them were widely disseminated and extensively used by Texas school districts. (YLB)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED 415 360

*A Report  
to the 75th  
Texas Legislature*

*from the  
Texas Education Agency*

*Recommended  
High School Programs  
of Study for College  
Preparation and Broad  
Career Concentrations*

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

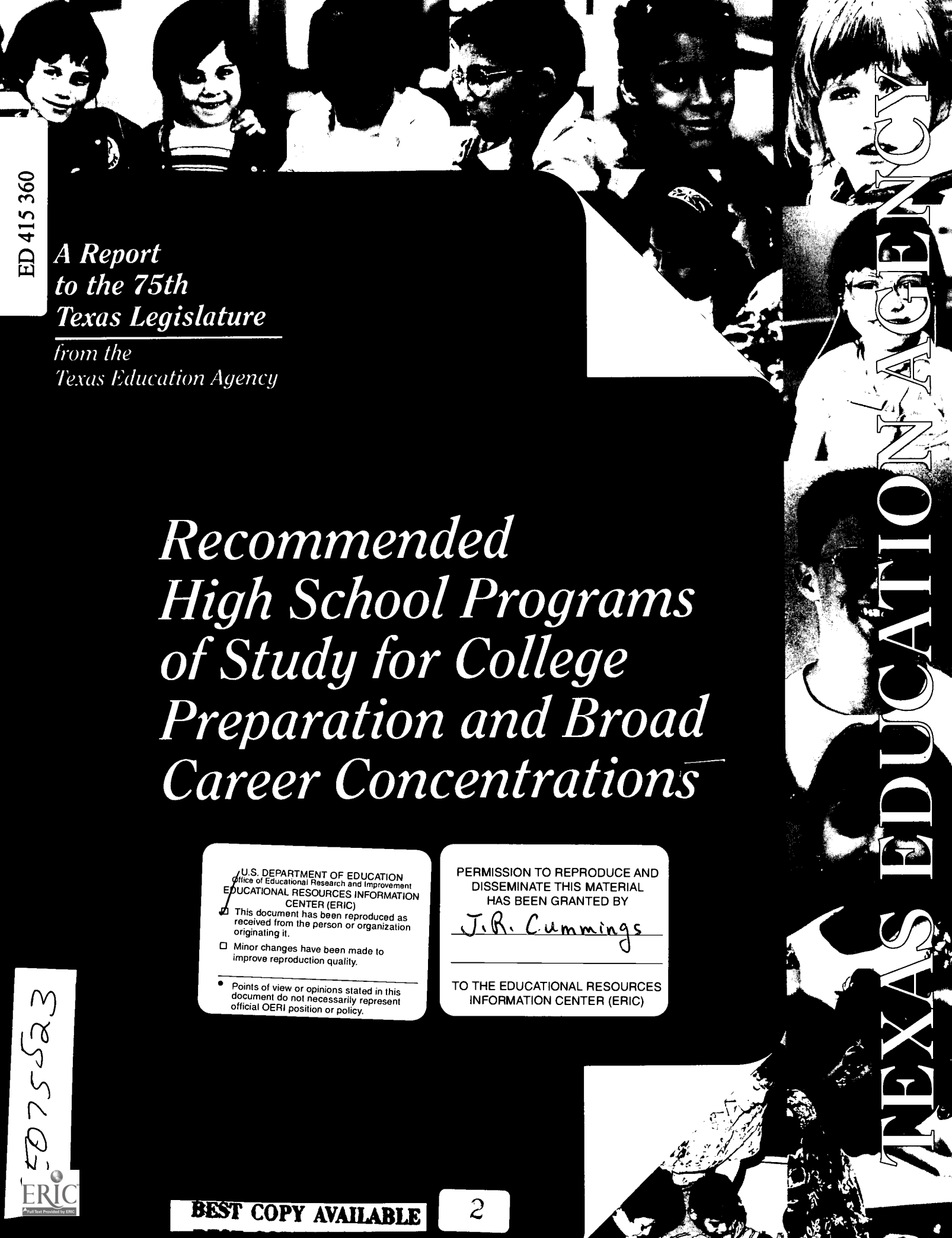
PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
HAS BEEN GRANTED BY

*J.R. Cummings*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

TEXAS EDUCATION AGENCY

ED 415 360



# Recommended High School Programs of Study for College Preparation and Broad Career Concentrations

A Report to the  
75th Texas Legislature

from the  
Texas Education Agency

Submitted to the Governor, Lieutenant Governor,  
Speaker of the House, and the Seventy-Fifth  
Texas Legislature

This Texas Education Agency publication is not copyrighted.  
Any or all sections may be duplicated.



# TEXAS EDUCATION AGENCY

1701 NORTH CONGRESS AVENUE ★ AUSTIN, TEXAS 78701-1494 ★ 512/463-9734 ★ FAX: 512/463-9838

MIKE MOSES  
COMMISSIONER OF EDUCATION

January 1, 1997

The Honorable George Bush, Governor of Texas  
The Honorable Bob Bullock, Lieutenant Governor of Texas  
The Honorable Pete Laney, Speaker of the House  
Members of the 75th Texas Legislature

I am pleased to provide to the 75th Texas Legislature the report *Recommended High School Programs of Study for College Preparation and Broad Career Concentrations*, which was prepared in response to Section 84 of the Texas Education Code. This report examines the concept of career concentration areas as preparation for postsecondary education or the workforce, and recommends seven career concentration areas. This report is now transmitted to you as required by state law.

Respectfully submitted,

Mike Moses  
Commissioner of Education

**(State Board  
for Career and  
Technology  
Education)**

**JACK CHRISTIE, D.C.**  
Chairman  
Houston  
District 6

**MONTE HASIE**  
Vice Chairman  
Lubbock  
District 15

**MARY HELEN BERLANGA**  
Secretary  
Corpus Christi  
District 2

**ALMA A. ALLEN, Ed.D.**  
Houston  
District 4

**DONNA BALLARD**  
The Woodlands  
District 8

**CAROLYN HONEA CRAWFORD, Ph.D.**  
Beaumont  
District 7

**WILL D. DAVIS**  
Austin  
District 10

**JOSE GARCIA DE LARA**  
San Antonio  
District 3

**GERALDINE MILLER**  
Dallas  
District 12

**MIKE MOSES, Ed.D.**  
Commissioner of Education  
(Executive Officer of the State Board of Education)

**RENE NUÑEZ**  
El Paso  
District 1

**ROBERT H. OFFUTT**  
San Antonio  
District 5

**DIANE PATRICK**  
Arlington  
District 11

**ROSIE COLLINS SORRELLS, Ed.D.**  
Dallas  
District 13

**RANDY STEVENSON**  
Tyler  
District 9

**RICHARD WATSON**  
Gorman  
District 14

**Committees  
of the  
State Board  
of Education**

**FINANCE**

WILL D. DAVIS, Co-Chairman  
MONTE HASIE, Co-Chairman  
JACK CHRISTIE, D.C.  
CAROLYN HONEA CRAWFORD, Ph.D.

**STUDENTS**

DONNA BALLARD, Chairman  
MARY HELEN BERLANGA  
GERALDINE MILLER  
ROBERT H. OFFUTT  
ROSIE COLLINS SORRELLS, Ed.D.  
RANDY STEVENSON

**PERSONNEL**

DIANE PATRICK, Chairman  
ALMA A. ALLEN, Ed.D.  
JOSE GARCIA DE LARA  
RENE NUÑEZ  
RICHARD WATSON

**PERMANENT SCHOOL FUND**

RENE NUÑEZ, Chairman  
MARY HELEN BERLANGA  
WILL D. DAVIS  
JOSE GARCIA DE LARA  
MONTE HASIE  
GERALDINE MILLER

**LONG-RANGE PLANNING**

ROBERT H. OFFUTT, Chairman  
ALMA A. ALLEN, Ed.D.  
DONNA BALLARD  
JACK CHRISTIE, D.C.  
CAROLYN HONEA CRAWFORD, Ph.D.  
DIANE PATRICK  
ROSIE COLLINS SORRELLS, Ed.D.  
RANDY STEVENSON  
RICHARD WATSON

CONTENTS

Executive Summary..... 1

Recommended High School Programs of Study for College Preparation and  
Broad Career Concentrations..... 3

Comparison of Career Concentration Areas..... 9

This report was developed by the Texas Education Agency in response to a mandate by the 74th Texas Legislature in Senate Bill 1, §84, that "Not later than January 1, 1997, the commissioner of education shall report to the legislature concerning recommended high school programs of study for college preparation and for broad career concentrations in areas such as arts and communication, business and management, health services, human resources, industrial and engineering systems, and natural resources. The recommendations must address providing guidance to a student on sequences of rigorous courses that will prepare the student for continued learning in postsecondary educational, training, or employment settings."

This report fulfills the legislative mandate by recommending broad career concentration areas, all of which prepare students for postsecondary education. Career concentration areas are clusters of careers/occupations that are grouped because many of the people in them share similar interests and strengths. Career concentrations are flexible and fluid. This flexibility allows students to move in many directions both in and out of a concentration area as new knowledge and experiences affect career directions. Career concentration areas assist school districts in organizing their curriculum into sequences of courses that prepare students for life after graduation.

A survey regarding the use of career concentration areas in Texas independent school districts was conducted by the State Occupational Information Coordinating Committee as part of a federally funded contract with the Texas Education Agency and Texas Higher Education Coordinating Board. Responses to the survey indicate that approximately 58 percent of Texas school districts currently use variations of the career concentration area concept to help students prepare for working life. The number of career concentrations used by Texas school districts varies from one to 13. Nationally, the number of utilized concentrations varies from two to 13.

The commissioner of education reviewed three alternatives for the Legislature's consideration:

### Alternative 1

Adopt the seven career concentration areas previously identified by the Texas Education Agency:

- Agricultural Science and Natural Resources Careers
- Art, Communications, and Media Technology Careers
- Business and Marketing Careers
- Health Science Technology Careers
- Human Development, Management, and Services Careers
- Industrial and Engineering Technology Careers
- Personal and Protective Services Careers

## Alternative 2

Adopt the eight career concentration areas recommended by the State Occupational Information Coordinating Committee:

Agricultural, Environmental, and Natural Resources  
Arts, Communications, and Media  
Business, Management, and Marketing Operations  
Engineering and Science-Related Technologies  
Health Professions and Related Sciences  
Human Development and Services  
Industrial, Manufacturing, and Transportation Operations  
Personal, Protective, and Miscellaneous Services

## Alternative 3

Adopt the four career concentration areas proposed in the Texas Workforce Commission's grant proposal for federal funds under the School-to-Work Opportunities Act:

Arts and Communications  
Business and Commerce  
Science and Technology  
Human and Health Services

The commissioner of education recommends the adoption of Alternative 1. The career concentrations in Alternative 1 have been recommended by the Texas Education Agency and have been adopted by school districts throughout the state. Materials developed around these seven career concentrations have been widely disseminated and are extensively used by Texas school districts. Eighty percent of Texas school districts responding to a State Occupational Information Coordinating Committee's survey stated that these seven career concentrations should be retained.

The commissioner of education submits this additional recommendation to the Texas Legislature:

- ★ School districts should be encouraged to adopt and use flexible career concentration areas for *all* Texas students. These concentration areas should be based on rigorous sequences of courses. Implementation of these concentration areas should occur through guidance and counseling programs. The Texas Education Agency recommends that school districts be encouraged to develop and/or expand a career guidance and counseling component for all students as part of a comprehensive school guidance program for Grades K-12.



## Background

While some students will go to college, all students will eventually go to work, either in the workplace or in the home. Work is an intimidating prospect for many of today's graduates. The labor market is subject to rapid technological change that may render a graduate's hard-learned skills obsolete. Companies with long-standing reputations for offering employees lifelong employment routinely lay off workers. As circumstances change, individuals engaged in the unpaid work of the home may choose to enter the paid work force, or suddenly be forced to secure paid employment to support a family.

Today's graduates should be prepared to encounter multiple career changes during their lifetimes. Our students should learn more than basic academic and employability skills: they need to understand how their education and decision-making skills relate to career opportunities. They should be prepared for a lifetime of learning and change. A major role of education is to prepare students for an uncertain future. That future can be far less intimidating when students form career goals and a road map for achieving them. By making available flexible career concentration areas for all Texas students that give students the preparation to enter postsecondary education or the workforce, school districts can help students set goals and gain knowledge and skills that lead to successful futures. Career concentration areas will improve students' readiness to deal with change in the workplace. As an added benefit, students with goals and the means to reach them have greater incentive to achieve academically and to behave in a manner that is acceptable to society.

## Purpose of This Report

Section 84 of Senate Bill 1 requires that "Not later than January 1, 1997, the commissioner of education shall report to the legislature concerning recommended high school programs of study for college preparation and for broad career concentrations in areas such as arts and communication, business and management, health services, human resources, industrial and engineering systems, and natural resources. The recommendations must address providing guidance to a student on sequences of rigorous courses that will prepare the student for continued learning in postsecondary educational, training, or employment settings."

This report explores the use of career concentration areas in Texas school systems and recommends broad career concentration areas.

## Description of Career Concentration Areas

Career concentration areas are clusters of careers/occupations that are grouped because many of the people in them share similar interests and strengths. Career concentrations assist school districts in organizing their curriculum into rigorous sequences of courses that prepare students for the rigors of life after graduation in the paid workforce or unpaid work of the home. Career concentrations are flexible and fluid. This flexibility allows students to move in many directions both in and out of a concentration area as new knowledge and experiences affect career goals. The graduation plan is tailored to fit the individual needs of each student. Students are entitled to change their minds, so the graduation plan has to adapt to their changing needs and the changing needs of the world they are about to enter. Career concentration areas open, rather than narrow, students' options, while providing a focus and insight into the

relevance of education that is often missing in other course selection processes. The flexibility of career concentrations extends to local implementation: school districts implement career concentrations that best suit the needs of their students and communities. For example, a school system in a community with a large health care system but few manufacturing enterprises might develop a Health Occupations career concentration, but not a Manufacturing Operations career concentration. Small districts may offer fewer career concentrations than larger districts.

Each career concentration area is an articulated, cross-disciplinary mixture of courses that provide the academic and occupational competencies necessary for a variety of occupations within that particular concentration. This “cross pollination” fosters cross-discipline curriculum planning, integration of academic and career concepts, and enhances student acquisition of academic and career skills. The resulting graduation plans assist school personnel in developing relevant courses of study while promoting higher expectations for all students.

Students’ career concentrations and graduation plans are developed locally through cooperative efforts between students, their parents, teachers, school counselors, and/or other professionals. A student’s selection of a career concentration should be based on her or his individual career interests and aptitudes, which should be identified no later than the eighth grade. In school districts utilizing the career concentrations concept, each student has a specific, individualized, flexible career concentration, based on a career objective and made up of a rigorous sequence of academic and career/technology courses. These concentrations provide the theoretical and applied concepts students need in order to enter a specific occupation or a cluster of related occupations, either after high school or following postsecondary education.

Because all students participating in a career concentrations program take a “core foundation” of rigorous academic courses, some of which are chosen to meet the knowledge and skill requirements of the career objective, students have the latitude to change their career concentration if their interests change. The “core foundation” concept provides all students with the academic courses necessary to enter most Texas postsecondary institutions.

The Texas Education Agency currently identifies seven career concentration areas: Agricultural Science and Natural Resources; Arts, Communications, and Media; Business and Marketing; Industrial and Engineering Technology; Health Science Technology; Human Development, Management, and Services; and Personal and Protective Services. These career concentration areas, or variations of them, are widely used throughout the state.

### **Career Development Guidance and Counseling**

While the success of career concentration areas involves excellence in curriculum and instruction, the singular most important aspect of this approach may be comprehensive career guidance and counseling involving parents, students, career guidance counselors, and other school personnel. Comprehensive career development is a process—not an event—by which a student develops self and career identity, explores career options, and begins making career decisions.

Career development guidance is the cornerstone of a good career concentration areas strategy. It is the process by which students identify educational and career goals. Students are often left to "find themselves" because school personnel do not believe that they are ready to make decisions regarding their futures. Ideally, career development begins in the elementary grades: the earlier students learn about possible careers and how their education applies to the working world, the earlier they can prepare to succeed in school and later life.

Comprehensive career development guidance programs help students understand themselves by expanding their self-awareness and self-knowledge, and by helping them investigate and explore career and educational options and possibilities. At the elementary level, students develop an awareness of why people work and the kinds of work they do. At the middle school level, the career development focus is on investigating options based on students' abilities and interests. (As part of a comprehensive career development guidance program, the Texas Education Agency encourages school districts to require participation by all students in one semester of career investigation no later than eighth grade that provides each student with a graduation plan for Grades 9-12 and beyond.) In high school, students begin to narrow their focus through further exploration of career options and through the development of skills and competencies required within a specific career concentration.

### **Results of the State Occupational Information Coordinating Committee Survey: Use of Career Concentration Areas in Texas Independent School Districts<sup>1</sup>**

In order to explore the use of career concentration areas in Texas school districts, the Texas Education Agency and Texas Higher Education Coordinating Board contracted with the State Occupational Information Coordinating Committee to develop recommended high school programs of study and broad career concentrations, explore related data-collection issues, and prepare a report for the commissioner of education on the findings. Funding was provided under the federal Carl D. Perkins Vocational and Applied Technology Education Act. As part of the contract, a brief survey regarding the use of career concentration areas was developed and distributed to school districts operating career and technology education programs, services, and activities. The State Occupational Information Coordinating Committee also examined the career concentration areas used by other states and recommended by several organizations. The complete results of the State Occupational Information Coordinating Committee study appear in *High School Programs of Study* (draft document). Portions of the committee's study appear in the following two sections.

The survey was included in the application package for federal funding under the Carl D. Perkins Vocational and Technology Education Act. Response was voluntary, and schools were not given a deadline for returning the survey. A follow-up was initiated during the summer inservice conference for local career and technology education administrators and directors. Responses continued to be received into the fall of 1996.

<sup>1</sup> Draft document: High School Programs of Study, Texas State Occupational Information Coordinating Committee, 1996.

School districts were asked to respond to three questions: 1) Does the district use the career concentration areas concept to help all students plan their program; 2) In reference to current career concentrations identified above, should the Texas Education Agency change the number of concentrations used to group or cluster career areas of study; and 3) Should data related to career concentrations be collected through the Public Education Information Management System?

Nine hundred and seventy-three Texas school districts operate Career and Technology Education programs, services, and activities, including the Windham School District operated by the Texas Department of Criminal Justice. These districts represent a total student enrollment at all grade levels of 3,793,601. Administration of the survey to the 973 school districts resulted in 319 responses (32.8 percent of the school districts) representing 2,676,376 students (70.5 percent of total statewide enrollment). Thirty-five of the 40 largest school districts responded to the survey. Responses to the survey demonstrate that career concentrations are already widely used in Texas school districts, although the breadth of programs varies considerably. Following are the survey results:

*Question 1: Does the district use the career concentration areas concept to help all students, both academic and career and technology, plan their program?*

- ★ More than 61 percent of the respondents (196 districts), representing 58.1 percent of statewide enrollment (1,553,964), indicated they currently use the career concentrations concept to assist all students in planning their instructional program.
- ★ Slightly less than 23 percent of the respondents (76 districts), representing 33.0 percent of enrollment (883,357), indicated they use career concentrations to assist only career and technology education students.
- ★ The data reflect that more than 91 percent of school districts responding are using the career concentrations concept to help students.
- ★ Less than 15 percent of the respondents (47 districts), representing less than 9 percent of enrollment (239,055) in the responding districts, reported that they do not use the career concentrations concept to help any students plan their instructional program.

*Question 2: In reference to current career concentration areas identified above, should the division (Texas Education Agency) change the number of concentrations used to group or cluster career areas of study?*

- ★ Although the Texas Education Agency has identified seven career concentration areas that may be used on a voluntary basis, the survey reflects that the actual concentrations used by school districts across the state vary from one to 13.
- ★ Over 80 percent of respondents (258), representing 78.1 percent of respondents' enrollment (2,090,584), recommended that the seven career concentrations identified by the Texas Education Agency continue to be used.
- ★ Slightly less than 7 percent of respondents (22), representing 9.4 percent of enrollment (250,538) in responding districts, recommended that more concentrations be used.

- ★ About 7 percent of respondents, representing enrollment of 235,429, recommended that fewer concentrations be used.
- ★ Seventeen districts (5.3 percent), representing 3.7 percent of enrollment (99,825), did not respond to this item.

***Question 3: Should data related to career concentrations be collected through the Public Education Information Management System (PEIMS)?***

- ★ Career concentrations data is not collected through PEIMS. More than 65 percent of respondents (209 districts), representing slightly less than 84 percent of enrollment (2,239,740), recommended that data related to career concentrations be collected through PEIMS.
- ★ Thirty-two percent of responding districts (102), representing 15 percent of enrollment (401,934), recommended that such data not be collected through PEIMS.
- ★ Eight school districts (2.5%), representing 1.3 percent of enrollment (34,702), did not respond to this item.
- ★ The districts responding recommended by a margin of more than 2-to-1 that the PEIMS system and procedures be used to collect data related to career concentrations, i.e., high school programs of study.

**Differing Concepts of Career Concentrations<sup>2</sup>**

According to the State Occupational Information Coordinating Committee's research, the number of concentrations used to organize curriculum varies from state to state, region to region, and district to district. For example, in the survey cited above, Texas school districts reported using from one to 13 career concentrations. New Jersey offers two career concentrations to organize the curriculum; North Carolina proposes 13 concentrations.<sup>3</sup> Following are brief descriptions of career concentrations proposed for use, or developed by, several different entities: the 74th Texas Legislature in Senate Bill 1, §84; the Texas Education Agency; the National Board for Professional Teaching Standards; the National Skill Standards Board; the Texas Workforce Commission's application for a federal grant under the School-to-Work Opportunities Act; and the Texas State Occupational Information Coordinating Committee:

- ★ Senate Bill 1, §84, cites six career concentrations as examples of concentrations the commissioner may include in his January 1997 report to the legislature.
- ★ The Texas Education Agency has identified seven career concentrations that districts may voluntarily use to structure a decision-making process so that all students, with the assistance of adult family members and other knowledgeable adults, may plan an initial, flexible high school program of study for focusing their strengths and energies and for selecting rigorous sequences of courses and activities to accomplish their identified educational objectives.

<sup>2</sup> *ibid.*

<sup>3</sup> "States Encourage Students to Select Career Majors," *School-to-Work Report (5:5)*, p. 36.

- ★ The National Board for Professional Teaching Standards created eight clusters for vocational education to organize the proposed standards in a manageable number of fields to try to reflect the changes in the organization of the workplace and a knowledge of adolescent development as well as changes in the field due to the wave of reforms: increased vigor; integration of academics; activity-based, project-oriented teaching methods; contextual instruction; and real-world experiences.<sup>4</sup>
- ★ The National Skill Standards Board suggests nine career concentration areas for structuring communications to specify the knowledge, basic skills, technical skills, aptitudes and attitudes required for recruitment, hiring, education and training, promotion, and retention in a company or within an industry to encourage the alignment of school curricula with industry requirements, to update educational objectives as workplace demands change, and to ensure a better return on public and private education and training investments and to help employees and job seekers make sound decisions about their own education and training needs in a changing marketplace.<sup>5</sup>
- ★ The Texas State Occupational Coordinating Committee recommends the adoption of eight career concentration areas. They note that there is nothing magical about that number, other than the fact that it comes closest to reflecting a prevailing consensus for organizing the curriculum in terms of the activities and recommendations presented by the National Board for Professional Teaching Standards (for vocational education) and the National Skill Standards Board. This recommendation is intended to be flexible.
- ★ Texas' application for federal funds under the School-to-Work Opportunities Act proposes four broad career concentration areas recommended by employers to offer coherent sequences of courses that integrate academic and occupational instruction with ties to post-high school programs.

The above approaches are compared in the following chart.

<sup>4</sup> "Draft: Vocational Education Teaching Standards for National Board Certification." Washington, DC: National Board for Professional Teaching Standards, 1996.

<sup>5</sup> "Booklet." Washington, DC: National Skill Standards Board, 1996.

## Comparison of Career Concentration Areas

Senate Bill 1, Section 84 Concentrations	Texas Education Agency Identified Career Concentrations	National Board for Professional Teaching Standards	National Skill Standards Board	Texas School-to-Work Application	SOICC's Proposed Career Concentrations
Natural Resources	Agricultural Science and Natural Resources	Agriculture and Environmental Sciences	Agricultural, Forestry and Natural Resources		Agricultural, Environmental, and Natural Resources
Arts and Communication	Arts, Communications, and Media	Arts and Communication	Arts, Media, and Communication	Arts and Communications	Arts, Communications, and Media
Business and Management	Business and Marketing	Business, Marketing and Information Management	Business, Marketing, and Management	Business and Commerce	Business, Management, and Marketing Operations
			Construction		
Industrial and Engineering Systems	Industrial and Engineering Technology		Engineering and Science-Related Technologies	Science and Technology	Engineering and Science-Related Technologies
		Family and Consumer Sciences			
Health Services	Health Science Technology	Health Services	Health Occupations	Human and Health Services	Health Professions and Related Sciences
Human Resources	Human Development, Management, and Services	Human Services			Human Development and Services
		Manufacturing and Engineering Technology	Manufacturing Operations		Industrial, Manufacturing, and Transportation Operations
	Personal and Protective Services		Community Services and Consumer and Personal Services		Personal, Protective, and Miscellaneous Services
		Technology Education			
			Transportation, Material Moving and Services		

Whatever the recommended number of career concentrations, flexibility is key to success. Students must have the opportunity to change concentrations as their interests change. Career concentrations themselves should be readily adaptable to adjust to the formation of new industries, shifting labor market demand, new skill requirements, and the needs of the students and communities they serve. Whole new industries with unprecedented occupational employment demand may emerge and public education must be prepared to step outside conventional boxes in order to respond effectively and swiftly.<sup>6</sup> School districts must always be able to expand career concentration areas to provide students opportunities to enter emerging occupations in the labor market. Smaller school districts must have the option to utilize only the concentrations which fit their needs and resources.

### Recommendations

The commissioner of education reviewed three alternatives for the Legislature's consideration of recommended high school programs of study and broad career concentrations:

#### Alternative 1

Adopt the seven concentration areas previously identified by the Texas Education Agency:

- Agricultural Science and Natural Resources Careers
- Art, Communications, and Media Technology Careers
- Business and Marketing Careers
- Health Science Technology Careers
- Human Development, Management, and Services Careers
- Industrial and Engineering Technology Careers
- Personal and Protective Services Careers

Rationale: The career concentration areas in Alternative 1 have been recommended by the Texas Education Agency and have been adopted by school districts throughout the state. Materials developed around these seven career concentration areas have been widely disseminated. Eighty percent of Texas school districts responding to the State Occupational Information Coordinating Committee's survey stated that these seven career concentrations should be retained.

#### Alternative 2

Adopt the eight career concentration areas recommended by the State Occupation Information Coordinating Committee:

- Agricultural, Environmental, and Natural Resources
- Arts, Communications, and Media
- Business, Management, and Marketing Operations
- Engineering and Science-Related Technologies
- Health Professions and Related Sciences
- Human Development and Services
- Industrial, Manufacturing, and Transportation Operations
- Personal, Protective, and Miscellaneous Services

<sup>6</sup> Terry Ramsey and Marc Anderberg. "Emerging and Evolving Occupations." Austin, Texas: TXSOICC, 1996.



Rationale: Alternative 2 provides a comprehensive set of career concentration areas based on the State Occupational Information Coordinating Committee's research and current practices at the state and national levels. These concentration areas are broad enough to encompass most existing career fields. The breadth and detail will also assist districts in developing their career concentrations. The State Occupational Information Coordinating Committee has worked with Public Education Information Management System personnel at the Texas Education Agency to develop methodologies to collect and report data regarding these eight career concentration areas.

### Alternative 3

Adopt the four career concentration areas proposed in the Texas Workforce Commission's grant proposal for funds under the School-to-Work Opportunities Act:

Arts and Communications  
Business and Commerce  
Science and Technology  
Human and Health Services

Rationale: These four concentration areas offer simplicity and flexibility. Four concentrations might be more attractive to smaller school districts than seven or eight concentrations, as smaller districts often do not have sufficient resources to implement more than a few concentrations. This alternative will also encourage the integration of academic and career and technology programs by removing perceived "tracks."

The commissioner of education recommends Alternative 1. The career concentrations in Alternative 1 have been previously identified by the Texas Education Agency and are used extensively by school districts throughout the state. Materials developed in support of these concentrations are widely used by school districts. In the State Occupational Information Coordinating Committee's survey, 80 percent of Texas school districts supported the continued use of the seven career concentration areas.

The commissioner of education submits this additional recommendation to the Texas Legislature:

- ★ School districts should be encouraged to adopt and use flexible career concentration areas for *all* Texas students. These concentrations should be based on rigorous sequences of courses. Implementation of these career concentration areas should occur through guidance and counseling programs. The Texas Education Agency recommends that school districts be encouraged to develop and/or expand a career guidance and counseling component for all students as part of a comprehensive school guidance program for Grades K-12.

**TITLE VI, CIVIL RIGHTS ACT OF 1964; THE MODIFIED COURT ORDER, CIVIL ACTION 5281, FEDERAL DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TYLER DIVISION**

Reviews of local education agencies pertaining to compliance with Title VI Civil Rights Act of 1964 and with specific requirements of the Modified Court Order, Civil Action No. 5281, Federal District Court, Eastern District of Texas, Tyler Division are conducted periodically by staff representatives of the Texas Education Agency. These reviews cover at least the following policies and practices:

- (1) acceptance policies on student transfers from other school districts;
- (2) operation of school bus routes or runs on a nonsegregated basis;
- (3) nondiscrimination in extracurricular activities and the use of school facilities;
- (4) nondiscriminatory practices in the hiring, assigning, promoting, paying, demoting, reassigning, or dismissing of faculty and staff members who work with children;
- (5) enrollment and assignment of students without discrimination on the basis of race, color, or national origin;
- (6) nondiscriminatory practices relating to the use of a student's first language; and
- (7) evidence of published procedures for hearing complaints and grievances.

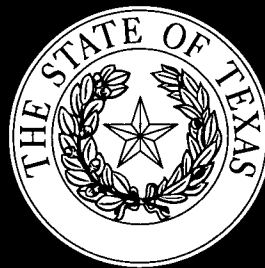
In addition to conducting reviews, the Texas Education Agency staff representatives check complaints of discrimination made by a citizen or citizens residing in a school district where it is alleged discriminatory practices have occurred or are occurring.

Where a violation of Title VI of the Civil Rights Act is found, the findings are reported to the Office for Civil Rights, U.S. Department of Education.

If there is a direct violation of the Court Order in Civil Action No. 5281 that cannot be cleared through negotiation, the sanctions required by the Court Order are applied.

**TITLE VII, CIVIL RIGHTS ACT OF 1964 AS AMENDED BY THE EQUAL EMPLOYMENT OPPORTUNITY ACT OF 1972; EXECUTIVE ORDERS 11246 AND 11375; EQUAL PAY ACT OF 1964; TITLE IX, EDUCATION AMENDMENTS; REHABILITATION ACT OF 1973 AS AMENDED; 1974 AMENDMENTS TO THE WAGE-HOUR LAW EXPANDING THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967; VIETNAM ERA VETERANS READJUSTMENT ASSISTANCE ACT OF 1972 AS AMENDED; IMMIGRATION REFORM AND CONTROL ACT OF 1986; AMERICANS WITH DISABILITIES ACT OF 1990; AND THE CIVIL RIGHTS ACT OF 1991.**

The Texas Education Agency shall comply fully with the nondiscrimination provisions of all federal and state laws, rules, and regulations by assuring that no person shall be excluded from consideration for recruitment, selection, appointment, training, promotion, retention, or any other personnel action, or be denied any benefits or participation in any educational programs or activities which it operates on the grounds of race, religion, color, national origin, sex, disability, age, or veteran status (except where age, sex, or disability constitutes a bona fide occupational qualification necessary to proper and efficient administration). The Texas Education Agency is an Equal Employment Opportunity/Affirmative Action employer.



Texas Education Agency  
1701 North Congress Avenue  
Austin, Texas 78701-1494

GE7 302 01

January 1997



**U.S. DEPARTMENT OF EDUCATION**  
*Office of Educational Research and Improvement (OERI)*  
*Educational Resources Information Center (ERIC)*



## NOTICE

### REPRODUCTION BASIS



This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").