Programs of Study Overview

The Texas Education Agency (TEA) requests preliminary public comment on proposed Career and Technical Education (CTE) course sequences, referred to as programs of study. Programs of study are course sequences that prepare students with the knowledge and skills necessary for success in their chosen career. These sequences embed relevant, real world experiences and culminate in a postsecondary credential.

The Division of College, Career, and Military Preparation has engaged members of the workforce, secondary education, and higher education to advise on the development of course sequences, industry-based certifications, and work-based learning opportunities to ensure students are prepared for in-demand, high-skill, high-wage careers in Texas. We seek additional feedback from district and campus level administrators, CTE coordinators, CTE teachers, and counselors during preliminary public comment.

Highlights of Programs of Study Initiative

- Provides students with course sequences that prepare them for success in in-demand, high wage, high skill careers in Texas
- Allows for flexibility in district and campus course offerings
- Leads to postsecondary credentials
- Expands opportunities for students to engage in STEM-related occupations
- Includes resources to assist in scheduling and career planning conversations
- Allows districts to address the needs of their community through the development of course sequences that are supported by regional workforce data

Benefits of Programs of Study Initiative

- Provides students a career path with opportunities to continue directly into postsecondary and the workforce
- Aligns education to the regional economy building off the diverse needs of the Texas’ economy
- Allows for better data collection and reporting of CTE concentrators for districts
- Creates stronger TEKS through recommendations for future gap analysis between course standards and job skills
- Allows for flexibility in alignment of teacher certifications to the course sequencing

Programs of Study Implementation Considerations

- The course sequences within each program of study will be used for federal reporting of CTE concentrators
- The new federal definition for a CTE concentrator, as outlined in Perkins V, is the completion of two courses (for two or more credits) within a program of study
- Proposed definition for a CTE completer to be the completion of three or more courses for four or more credits including one level three or level four course
- Perkins funds can be used to support statewide or approved regional programs of study
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Programs of Study Definition
Perkins V describes a program of study as a coordinated, nonduplicative sequence of academic and technical content at the secondary and postsecondary level that:

- Incorporates challenging state academic standards
- Addresses academic, technical, and employability skills
- Aligns with the needs of industries in the state, regional, and/or local economy
- Progresses in specificity, beginning with all aspects of industry and leading to more occupation specific instruction
- Has multiple entry and exit points that incorporate credentialing
- Culminates in the attainment of a recognized postsecondary credential

Changes to Career Clusters:
Labor market analysis identified several areas where occupations and postsecondary training overlap across career clusters. The areas of overlap include Business, Marketing, and Finance as well as Law, Public Safety, Corrections, and Security and Government and Public Administration. The Science, Technology, Engineering, and Math (STEM) cluster did not align with any one industry sector but rather had occupations spread throughout other clusters. This is represented across career clusters and provides students with additional opportunities to engage in STEM. A new Energy career cluster was created to address Texas’ diverse economic landscape. Changes to the career clusters are summarized below:

<table>
<thead>
<tr>
<th>16 Career Clusters</th>
<th>Change to career cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Food, &amp; Natural Resources</td>
<td>No Change</td>
</tr>
<tr>
<td>Architecture &amp; Construction</td>
<td>No Change</td>
</tr>
<tr>
<td>Arts, A/V Technology, &amp; Communications</td>
<td>No Change</td>
</tr>
<tr>
<td>Business Management &amp; Administration</td>
<td>Combined with Marketing and Finance</td>
</tr>
<tr>
<td>Government &amp; Public Administration</td>
<td>Combined with Law and Public Safety</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>No Change</td>
</tr>
<tr>
<td>Finance</td>
<td>Combined with Marketing and Business</td>
</tr>
<tr>
<td>Health Science</td>
<td>No Change</td>
</tr>
<tr>
<td>Hospitality &amp; Tourism</td>
<td>No Change</td>
</tr>
<tr>
<td>Human Services</td>
<td>No Change</td>
</tr>
<tr>
<td>Information Technology</td>
<td>No Change</td>
</tr>
<tr>
<td>Law, Public Safety, Corrections, &amp; Security</td>
<td>Combined with Government</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>No Change</td>
</tr>
<tr>
<td>Marketing</td>
<td>Combined with Business and Finance</td>
</tr>
<tr>
<td>STEM</td>
<td>Placed programs within industry sectors, embedded throughout</td>
</tr>
<tr>
<td>Transportation, Distribution, &amp; Logistics</td>
<td>No Change</td>
</tr>
<tr>
<td>Add Energy Career Cluster</td>
<td>Added Energy Career Cluster</td>
</tr>
</tbody>
</table>
Programs of Study Methodology
The TEA conducted a process to identify high wage, high demand occupations in Texas to ensure alignment between industry and postsecondary education. The process included stakeholders from the Texas Workforce Commission, Texas Workforce Investment Council, and the Texas Higher Education Coordinating Board. The course sequencing methodology backwards-mapped occupations from job knowledge and skill demand, through postsecondary preparation (college, trade schools, certifications, etc.), to secondary education and triangulated data sources for the best results of labor projections alongside real-time labor data.

Phase I: Foundation occupations were identified utilizing median growth rate of 17%, median annual salary of $35,339, and a minimum annual openings floor of 500, each based on the data from all occupations in Texas. Occupations that were related to the foundation occupations were identified to form groupings of occupations and initial focus for programs of study.

Phase II: Groupings of occupations were formed based on: similarities in detailed work activities; directly or closely related postsecondary training and education programs; or directly or closely related through standard occupational classification by ONET. These groupings of occupations were compared to the median data of all occupations in Texas.

Data sources include EMSI data (real-time labor market information), labor projections, Local Workforce Boards Targeted Occupations, and the Bureau of Labor Statistics.

Implementation Considerations
It is important that the TEA solicit stakeholder feedback prior to determine if there are recommendations to the State Board of Education (SBOE). The public comment process will allow the TEA to take responses from the field and approach the SBOE with any items for consideration. The following items require stakeholder feedback:

- Add the Energy career cluster to §TAC Chapter 130 with corresponding courses listed within the new career cluster
- Allow for additional STEM focused programs of study to qualify for the STEM endorsement
- Allow for innovative courses to serve as the final course in a sequence to earn an endorsement
- Allow for advanced academic courses such as Advanced Placement (AP) courses to count toward an endorsement within a CTE program of study
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- Allow for innovative courses to be developed to meet knowledge and skills gap areas identified by industry
- Consider revisions to prerequisites for courses
- Revise the list of courses identified for funding as advanced CTE courses
- Allow for the proposed Practicum in Entrepreneurship course to meet endorsements across multiple career clusters