



Identifying Competencies For CTE Teachers Serving Special Populations – Validating a DACUM Survey

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DACUM Premises

- Three premises underlie the DACUM method
 - Experts in the field/profession can describe and define their job more accurately than anyone else.
 - An effective way to describe a job is to define the tasks that experts in the field perform.
 - All tasks, in order to be performed correctly, demand certain knowledge, skills, tools, and attitudes.

Procedure

- Participants were recruited through an invitation letter.
- Stipend provided.
- The DACUM process was explained and a timeline for accomplishing tasks was established.
- All related questions were answered.
- Instructions regarding each task are sent along with reminders.
- All tasks accomplished through email/online.

Participants

- 11 Experts
 - 2 University Professors (Teacher Educators)
 - 2 CTE Teachers
 - 2 CTE Coordinator
 - 1 CTE Academy Principal
 - 1 Special Populations Coordinator
 - 1 Transition Specialist
 - 1 Education Service Center CTE Specialist
 - 1 Education Service Center Special Education Specialist
- All have experience working with or serving special populations in CTE

Duties (in rank order)

1. *Instruction:* Provide quality instruction, with frequent formative feedback, that prepares students to work in a variety of occupations classified under the AchieveTexas-defined sixteen* career clusters.
2. *Rigorous and Relevant Curriculum:* Demonstrate competency in CTE areas by employing occupational applications of course content which meets industry standards.
3. *Assessment and Evaluation:* Utilize a variety of assessment and evaluation strategies to measure students' technical skill level and knowledge gain.

Duties (in rank order)

4. *Managing Student Behavior*: Manage student behavior through procedures, clear expectations and structure.
5. *Managing Learning Environment*: Create an effective learning environment by structuring the classroom, managing resources and maintaining equipment/supplies. (formerly Classroom Management)
6. *Student Growth and Development*: Sponsor student leadership activities that allow students to demonstrate an independent spirit, self-determination, and the ability to participate in team work that incorporates democratic values.

Duties (in rank order)

7. *Career Development*: Assess students' career interests and skills and enable them to explore career-related experiences both inside and outside the classroom.
8. *Serving Special Populations*: Meet the needs of special populations placed in their program.
9. *Communication*: Communicate effectively with students, parents, colleagues, and community members.
10. *Professional Development*: Exhibit interest in self-improvement by participating in activities that advance professional development and personal growth.

Duties (in rank order)

11. *Policy Compliance:* Demonstrate working knowledge of and comply with current federal, state, local government, district, and campus policies.
12. *Inter-Departmental Collaboration:* Work with other agencies within the school/campus to provide a positive learning environment for all students.
13. *External Collaboration:* Collaborate with business, industry, post secondary training representatives and governmental agencies to extend and enrich opportunities for students.

Tasks in each Duty Area

- Participants were asked to generate a list of tasks needed to be accomplished by CTE teachers to fulfill each duty.
- A draft master list of tasks per duty was generated on the basis of panel's input.

***Instruction:* Provide quality instruction, with frequent formative feedback, that prepares students to work in a variety of occupations classified under the Achieve Texas-defined sixteen* career clusters.**

Tasks

1. Meet with cohort (including core curriculum) teachers for to identify shared objectives and district lesson plan creation.
2. Familiarize oneself with the 16 clusters recognized by Texas and the College Readiness Standards and be prepared to discuss each.
3. Seek National Council on Occupational Education Certification (COE) for Career and Technical Education (CTE) – related career clusters.
4. Track student hours toward certification and provide continuous feedback on certification progress.
5. Develop and implement research based, **differentiated strategies** that specify exact content and methods, address Texas Education Agency (TEA) course standards, reflect high expectations, and are result-oriented.
6. Create and put into practice lesson plans that reflect knowledge of the curricula and meets the needs of students that require **accommodations and modifications**.
7. Integrate relevant and specific knowledge into practical learning experiences based on business and industry accepted competencies.
8. Develop **multiple exit points (realistic available post-secondary opportunities)** within the curriculum which will lead to wage earning positions.

Rigorous and Relevant Curriculum: Demonstrate competency in CTE areas by employing occupational applications of course content which meets industry standards.

Tasks

1. Discuss and implement challenging academic/technical standards and workplace skills to prepare students for challenging high-performance places of work.
2. Participate in professional development activities such as conferences, workshops, and online study related to course curriculum and industry standards.
3. Using a variety of resources such as books, journal articles, and the internet, stay connected and informed about Labor Market information, industry policy, regulations and the standards that effect students' preparation and learning.
4. Plan, develop, implement and sustain an active business and industry advisory committee.
5. **Offer instruction and assess students** in current industry certifications related to CTE program being taught.
6. Create opportunities for practicum experiences within industry settings that align with the 16 AchieveTexas career clusters.
7. Create current learning experiences by developing work samples of real industrial settings and collaborating with industry leaders through an arrangement for work/study programs.
8. Maintain accreditation through the COE every three years.

***Assessment and Evaluation:* Utilize a variety of assessment and evaluation strategies to measure students' technical skill level and knowledge gain.**

Tasks

1. Develop and use competency-based learning and standards-based assessment tools [Texas Assessment of Knowledge and Skills (TAKS)] to monitor and report progress, evaluate programs, assess problem-solving skills, employability skills, and knowledge of the industry.
2. Provide both formative and summative assessment.
3. Provide skill demonstration opportunities for all students **through authentic, alternative assessments** including projects (to measure application of materials/concepts learned) and tests (to measure knowledge of materials/concepts) to facilitate real work experiences.
4. Develop and use effective skill sets and best practices related to the use of rubrics.
5. Establish and **publish exit points within curriculum** to students.
6. Establish and publish criteria/objectives to reach skill levels for each exit point.
7. Develop/ organize a record keeping/tracking program to be aware of student's progress and **mastery of required competencies** at all times and to provide timely, effective feedback to students.

Managing Student Behavior: Manage student behavior through procedures, clear expectations and structure.

Tasks

1. Develop, implement and respectfully reinforce a class-wide positive behavior system that includes age-appropriate awards, engages students in setting classroom norms and is established starting on the first day of class.
2. Discuss progress/regression with individual students and develop growth plans.
3. Implement research-based **individualized and group behavior management strategies**.
4. Participate in campus management plan and monitor compliant classroom procedures regularly.
5. **Participate in all appropriate Admission Review and Dismissal (ARD/IEP) committee meetings** and work with special education staff and/or the school counselor to understand and implement all individualized student behavior management plans and Individualized Education Plans (IEPs) as required by law.

Managing Learning Environment: Create an effective learning environment by structuring the classroom, managing resources and maintaining equipment/supplies.

Tasks

1. Maintain an atmosphere of calm and safety by designating specific functions in the room, managing seating and visuals, facilitating activity-based lessons and flexible grouping, maintaining cheerful décor, colors, lighting, temperature that are student-focused and that encourage a productive learning environment.
2. Develop **respectful, equitable, challenging learning strategies** and/or activities that are available for students who complete assignments ahead of schedule. Activities should be enriching and expand on past, current, or future course content.
3. Develop consistent procedures for beginning the day, including announcements etc., and planned routines to end the day ensuring that instruction and learning happen in a positive manner from bell to bell.
4. Have frequent safety inspections based on industry standards, fire codes and Occupational Safety and Health Administration (OSHA) regulations **paying special attention to compliance with the Americans with Disabilities Act (ADA)**.
5. Ensure that **accommodations and modifications are available and implemented** according to individual student needs.
6. Provide **feedback at ARD/IEP meetings** and collaborate with Special Education (SPED) and School Psychology (SPSY) personnel on IEPs and students' needs for equipment modifications or adaptations to ensure their active participation in classroom activities and success in learning.

Student Growth and Development: Sponsor student leadership activities that allow students to demonstrate an independent spirit, self-determination, and the ability to participate in team work that incorporates democratic values.

Tasks

1. Devise **instruction and evaluation that incorporates group work** (based on "Collaborative Learning Models" and differentiated instructional strategies) as well as individual work.
2. Create venues or competitive opportunities for students to receive awards, scholarships, and recognition for exemplary work, participation and contributions.
3. Establish professional organizations such as Career and Technical Education Student Organizations (CTSO) where students can participate in leadership and skill competitions as well as learn, practice, and demonstrate skills appropriate to their industry success [Future Business Leaders of America (FBLA), Future Farmers of America (FFA), Skills USA, Talent Search Programs (TSP) and many more].
4. Identify and take action to **address perceived or real barriers for club or group participation** (ensure the non-discrimination clause is stated on all public club materials).
5. Use scholarship applications and college entrance applications to help students focus service projects on required goals of these forms focusing on and beyond graduation from high school.
6. Encourage self awareness, goal setting, self regulation, and engaged decision making to promote **self determination**.

Career Development: Assess students' career interests and skills and enable them to explore career-related experiences both inside and outside the classroom.

Tasks

1. Utilize a variety of **formal and informal career assessment** instruments with students and concentrate on providing interpretation and feedback thereby helping students to identify broad career paths of interest (including non-traditional options).
2. Summarize career development and career assessment data on students each year. Use data to help district, campus and CTE program plan for future CTE program trends, development and implementation.
3. Have industry recruiters, military recruiters, and college and technical school recruiters present opportunities so students have a wide variety of experiences and options to aid in building their individual and academic career plans, 4-6 year plans and **bridges with postsecondary opportunities**.
4. Assign research projects/presentations that are respectful, instructionally sound and related to CTE course and/or career cluster of interest.
5. Develop an extensive career exploration library of resources for use by all students and staff.
6. Implement instructionally sound and research based simulation games that will get the students involved and allow them to use their critical thinking and analysis skills to maneuver the game's success.
7. Talk to parents about post-secondary expectations and include them in building the students 4-6 year plan of study.
8. Attend ARD/IEP meetings and **lead discussion on realistic opportunities** that will meet the students' desired workforce choices.

Serving Special Populations: Meet the needs of special populations placed in their program.

Tasks

1. Identify and meet the individualized needs of all special populations in CTE.
2. Attend ARD/IEP meetings and implement IEPs, Individualized Accommodation Plans (IAPs), differentiated instruction, accommodations and modifications as appropriate for all eligible students.
3. Maintain frequent contact with parents, case managers and special populations' staff to identify learning strategies, develop resources, highlight need areas, monitor progress and provide feedback and celebrate educational success.
4. Administer customized career assessment instruments based on individual student needs.
5. Actively work with counselors and other professionals to help students with special needs develop high school plans of study (4–6 year plans) based on their interests.
6. Actively seek and participate in professional development opportunities to help become more skilled in serving the needs of all students.
7. Use differentiated instructional strategies, sheltered instructional strategies and language appropriate curriculum to serve the needs of English Language Learners (ELL) enrolled in CTE programs.
8. Attend professional development training addressing state and federal laws regarding serving students with special needs [Title IX, Title VI, Section 504, English as a Second Language (ESL) /Bilingual, ADA, Individuals with Disabilities Act (IDEA) etc.].

Communication: Communicate effectively with students, parents, colleagues, and community members.

Tasks

1. Use email, intranet, internet, the school district website(s), newsletters, personal letters and phone contact **to maintain constant, frequent contact** and serve as a resource for stakeholders such as parents, colleagues, and community.
2. Maintain active membership and communication with business and industry partners and affiliated professional organizations related to CTE program(s).
3. Establish and implement an **aggressive public relations campaign**.
4. Develop and maintain personal data information on all students enrolled in all CTE classrooms.
5. Actively participate in all core curriculum meetings and/or committees related to student achievement data , curriculum development and student achievement
6. Design written documents and a CTE course website which describes course content, course assessments, student expectations, teacher contact information and industry credential opportunities to distribute to each student and other appropriate stakeholders.
7. Seek out and **utilize information from parents**, colleagues, and community members to improve program delivery.
8. **Actively recruit and encourage participation** in programmatic activities and planning.
9. In the classroom, utilize role playing scenarios to demonstrate telephone/personal interview skills, effective workplace communication skills and business etiquette skills.

Professional Development: Exhibit interest in self-improvement by participating in activities that advance professional development and personal growth.

Tasks

1. Attend annual conferences to review latest trends and innovations in CTE course content and research in the areas of student retention, drop-out rates, **special education**, etc.
2. Attend professional development activities [organized by campus or Education Service Centers (ESCs)] related to course content, standards for teaching assignments and research-based instruction strategies.
3. **Enhance content knowledge and instructional skills** through membership and activity in professional organizations
4. To stay current, read professional publications, books, or trade magazines and use the internet to research issues/practices in your discipline.
5. **Exhibit and model effective leadership** for students.
6. Create an environment that would allow students to create a Professional Development Day conducted by students.
7. Tour or volunteer at local, state, and national industries that are related to the program.
8. Use teacher self-report to develop staff development personal calendar for the year.

Policy Compliance: Demonstrate working knowledge of and comply with current federal, state, local government, district, and campus policies.

Tasks

1. Purchase and review professional industry journals that have current regulations and policies.
2. Conduct annual safety classes to discuss procedures, policy adherence and observance of the rules and regulation in each industry.
3. **Discuss with students the importance of compliance**, and the repercussions of failure to comply.
4. Utilize various resources such as specialists from ESCs, TEA staff and compliance monitoring software to integrate compliance-based best practices with active data monitoring.
5. Review and comply with campus rules, state and federal laws, Civil Rights regulations and Perkins use of funds requirements for CTE.
6. Dialog with administrators and attend Department/Faculty meetings.
7. Participate in professional development and local area/state CTE conferences that focus on both state and federal laws.
8. **Participate in professional development related to student learning competencies and serving the needs of special populations as well as gender related issues in the classroom.**
9. Maintain ethical practices of confidentiality and **adhere to the Family Education Privacy Rights Act** (FERPA).
10. Visit TEA website and subscribe to their listserv to read about hearing results, rulings and new regulations.

Inter-Departmental Collaboration: Work with other agencies within the school/campus to provide a positive learning environment for all students.

Tasks

1. **Collaborate with departments (including SPED)** and teachers that may share same instructional content areas.
2. Initiate collaborative dialog with school administration and resource/auxiliary personnel (speech therapist, school psychologist, **diagnostician, special education staff** etc.).
3. Participate in school board meetings, know your school attorney, attend Parent-Teacher Organization (PTO) and **ARD/IEP meetings**.
4. Develop a working list of support people (including building counselor) and the support that may be provided by each service provider.
5. Establish a cohesive relationship with agencies such as Communities in Schools (CIS), Reserve Officers' Training Corps (ROTC) and your ESC that is conducive to meeting the needs of students.
6. Invite agency representatives to speak and/or create a corner in the classroom for agencies to display fliers, brochures etc.
7. **Work with core curriculum content areas**, elective/fine art, and special education departments to create cross-curriculum connections and meet individual student needs.
8. **Participate in the Language Proficiency Assessment Committees (LPAC) process** with ESL/Bilingual staff.

External Collaboration: Collaborate with business, industry, post secondary training representatives & governmental agencies to extend/enrich opportunities for students.

Tasks

1. Establish an effective advisory committee consisting of core content instructors, educational administrators, representatives from business, industry, post secondary institutions, civic organizations, chambers of commerce and governmental **agencies (special populations' advocates)**.
2. Utilize previously built relationships **to organize work-based learning** and enrichment opportunities for students such as college days, internships, job shadowing, apprenticeships, mentorships, and service learning.
3. Keep abreast of current labor market trends as related to CTE program area and actively participate in appropriate professional organizations [for e.g. Texas Independent Automotive Association (TIAA), Texas Restaurant Association (TRA), etc.].
4. Initiate and keep communication lines open between community college and university staff related to CTE program area. Collaborate on dual credit or articulated credit as appropriate.
5. Subscribe to all appropriate electronic mailing lists and newsletters for CTE programs to provide current industry information to students.
6. Encourage national education associations to support workforce development through activities such as conference programs, special studies, and professional writings.
7. Invite professionals from Social Security, **Texas Workforce Commission (serves adult special populations)**, etc. to an "employment seminar" night.
8. Provide opportunities for Alternative Certification Training (ACT) certification and Career and Technical Education Management Application (CATEMA) Training.
9. **Work with parents to teach support strategies** that facilitate parent support and involvement with their children and their child's post-secondary goals.

CTE instructors' average rankings of special populations-related tasks (N=123) – Pilot

Tasks	Imp	Crit	Freq	Train
Know and understand the rules and regulations for serving the needs of special populations' students in the CTE classroom.	4.70	4.75	3.90	4.10
Understand regulations under the Individuals with Disabilities Education Act, Section 504, the Perkins Act, and requirements of Americans with Disabilities Act.	4.63	4.49	3.70	4.00
Actively seek and participate in professional development opportunities to help become more skilled in serving the needs of all students.	4.33	4.10	3.58	3.70
Use the strategies, modified curriculum and equipment in classroom and lab settings appropriate for English Language Learners (ELLs).	4.40	4.30	3.94	3.70
Identify all students enrolled in the course and their rights for service based on their status. (students under 504, ESL/Bilingual, and students with disabilities).	4.70	4.51	4.00	3.50
Attend Admission, Review and Dismissal (ARD) meetings and implement Individualized Education Plans, Individualized Assessment Plans, differentiated instruction, accommodations and modifications as identified - the student's ARD.	4.60	4.40	4.40	3.50
Maintain frequent contact with parents, case managers and special populations' staff to identify learning strategies, develop resources, highlight need areas, monitor progress and provide feedback.	4.49	4.16	3.60	3.50
Actively work with counselors and other professionals to help students with special needs develop high school plans of study (4–6 year plans) based on their interests.	4.34	4.10	3.45	3.30
Administer customized career assessment surveys.	4.00	3.74	2.83	3.20

Future Directions

- A rank-ordered list of tasks will be compiled and reflected in a DACUM Chart.
- Validation of the chart will be conducted using an online survey.
- Responses to the survey will be sought from CTE teachers, administrators and other special education personnel.
- Survey participants will rate the duties and tasks based on importance in CTE instruction, frequency of task performed and if additional training for the successful accomplishment of the task is required.
- Analysis of the survey data will yield topics that CTE teachers require further training in to effectively serve their students including those from special populations.
- Results will be used to further identify general knowledge and skills required of the CTE teacher serving special populations.

Website and Contact Information

- For more information please go to:
<http://ctsp.tamu.edu>

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