

# BEST PRACTICES

## IN CAREER and TECHNICAL EDUCATION



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## Foreword

The Career and Technical Special Populations Training and Resource Education Center (CTSP Center) is a collaborative effort between the Family Development and Resource Management (FDRM) unit of Texas Cooperative Extension and the Texas Education Agency (TEA). The CTSP Center received a one-year grant from TEA to provide CTE teachers and other educators with access to resources for improving their knowledge regarding the education of students with special needs enrolled in CTE programs.

### **CTSP Center's Role**

The primary role of the CTSP Center is to help CTE, general education, and special education teachers, educators, paraprofessionals, administrators, and parents who are concerned with serving students with special needs in Texas. The CTSP Center disseminates resources such as books, videos, curriculum guides, multimedia learning modules, and educational opportunities to the target groups. The CTSP Center staff answers questions or solicits the responses of external experts regarding several critical issues related to serving students with special needs.

The current funding from TEA envisioned the center as a special populations clearing house. One of the main requirements of the grant for the year 2006-2007 was to create multimedia training modules and support materials addressing principles and strategies of accommodating a broad range of special population student learning needs in CTE.

This DVD and the accompanying training manual are the resulting products. This is second in a series of learning modules showcasing best practices for career and technical education teachers, counselors, educators and parents concerned with serving students with special needs. The three modules are developed by the Career and Technical Special Populations Training and Education Resource Center (CTSP Center) in cooperation with Texas Cooperative Extension and expert consultants from University of North Texas, Baylor University and Education Service Center VI. We hope that our audiences find that the information enhances the services that they provide to their students with special needs.

*Module I – Accommodations and Modifications in CTE Classroom Instruction:* Created by Dr. Tracy Teaff, Associate Professor, University of North Texas - This module explores the link between academics and behavior, emphasizing the critical component of readying the instructional environment for learning. The module will examine multimodality teaching, cooperative learning, peer cooperation, individual modifications, and curricular modifications and adaptations. Running Time: 69 min

*Module II – Building Successful Partnerships:* Created by Mr. Greg Shipp, Education Specialist (CTE), Education Service Center VI - This module provides information about effective collaborative partnerships that contribute towards the successful education of students with special needs in CTE. Learners will be provided with knowledge regarding applicable laws, important partners and strategies for building and maintaining the partnership. Running Time: 45 min.

*Module III* – Career Guidance: Tools for Practical Applications: Created by Dr. Jewel Lockridge, Project Director – Project GEAR-UP, Baylor University and Dr. Lakshmi Mahadevan, Program Coordinator, CTSP Center - This module familiarizes learners with various career assessment tools and strategies to measure students’ interests, skill sets and personality traits. In addition, learners will be taught how to best use the resources available to them at their schools as well as a new simple survey technique to assess student’s career aspirations and expectations. Running Time: 46 min



## Tips for Trainers and Users

1. As users peruse the material they might find certain topics are more relevant to new teachers versus more experienced teachers, for e.g. first three chapters of accommodations and modifications. Portions of the “Career Guidance” module are useful for counselors, diversified career prep or career education teachers.
2. To aid in this regard the modules are organized into chapters and users can choose to view only relevant topics.
3. We recommend the following guidelines for each module to be used at workshops.
  - a. The entire DVD does not have to be viewed in one day.
  - b. Again, consider your target audience and choose to show relevant topics.
  - c. Conduct various activities to accompany DVD content (refer to activities included with each module).
  - d. Include a pre and post test to examine level of learning (refer to PRE/POST tests included with each module – answers are marked with an asterisk).
  - e. Use evaluation surveys to provide feedback to the CTSP Center (refer to evaluation surveys provided with each module).
  - f. Refer to the FAQs provided to answer participant questions. In the case of further clarification forward questions or concerns to the CTSP Center alongwith participant contact information so that we may address them in a timely manner.
  - g. Refer to the training manual available online at <http://ctsp.tamu.edu/videos07> for FAQs, pre and post tests, evaluations and workshop activities that accompany the DVD.
  - h. Refer to the <http://ctsp.tamu.edu/videos07/toolbox> to download all teacher/educator and parent tools that accompany the modules.
  - i. When viewing the DVD content online please utilize appropriate software such as Quicktime for Macs or Windows Media Player for PCs.
  - j. All technical questions or concerns regarding the DVD content can be directed to [lmahadevan@ag.tamu.edu](mailto:lmahadevan@ag.tamu.edu).
  - k. The CTSP Center will not provide professional development credits from in-service workshops. This will be the responsibility of the organizing entity.
    1. The organizing entity is responsible for all print costs associated with material distribution.
4. The DVD and online materials are available for distribution free of charge. TEA Copyright restrictions apply. For details on the Copyright restrictions please refer to the CTSP website at <http://ctsp.tamu.edu>.

## **Accommodations and Modifications in CTE Classroom Instruction**

CTE programs are the vehicle that provides a smooth transition for post-school activities whether it be more education or employment. In addition, the most recent changes in special education law have now provided that access for all students to all programs.

- ❖ The law now says that we must provide accommodations, modifications, and adaptations.
- ❖ The students we will be targeting in this module will be referred to as special needs students. These are the students that qualify under special education law and have a diagnosed disability under that law.
- ❖ Four key laws that have fostered the inclusion of special needs students in career and technology education programs, and outline the rights of students.
  - The Americans with Disabilities act of 1990 and Section 504 of the Rehabilitation Act of 1973
    - Both require access for students with disabilities to all federally funded programs and prohibit discrimination based on disability, in any aspect of public education programs.
  - The 1998 Perkins Act requires equal access for special populations, including students with disabilities, to all vocational programs, services, and activities, and prohibits discrimination based on special population status.
  - The Individuals with Disabilities Education Act or IDEA, as amended in 1997, establishes the right of students with disabilities to a free, appropriate, public education, including special education related services and transition services.
- ❖ If a student becomes eligible for services, an IEP meeting is held. The acronym “IEP” stands for Individualized Education Plan.
  - The IEP team determines what services and placements are needed for a student.
  - A modification and accommodations sheet and a plan with goals are determined, and all of that information is sent to all teachers.
  - In Texas, an IEP meeting is referred to as an admission, review, and dismissal (ARD) meeting and is conducted by a committee.
    - The ARD committee is composed of a student’s parent(s) and school personnel who are involved with the student including CTE teachers.

### ***What are Accommodations and Modifications?***

- ❖ Accommodations are simply supports.
  - You still have the same criteria, you have the same expectations of students, but it is simply a support to help the person get to the same point.
- ❖ Modifications are simply things that you may do that allow that person to get to the same point, but you may have to change the curriculum or the content.

### ***Common Concerns***

- ❖ A number of trends are emerging today that impact the special needs students in our high schools. These trends include:
  - standards based assessment
  - inclusion in and access to the general education curriculum and classroom
  - expectations of higher level thinking skills and problem solving skills
  - programs and plans for these students must be based on mastery and outcomes
- ❖ “Well, exactly how many special needs students or students with learning disabilities may be in my classroom and how will I know?”
  - 47 to 49% of students would be students with learning disabilities. Another 27% would be students with speech and language impairment.
  - A combined total of about two thirds of all the students with disabilities would fall into one of those two categories.
- ❖ How much are these students going to be in my classroom?
  - Up to 80% of their day. 80% of all students in all high school classes are spent in the regular classroom. This figure meets the letter of the law and ensures access to the general curriculum.
- ❖ How will I know that those students have a disability?
  - Fortunately, it is not up to you to detect that.
  - You will get a modification sheet that says, this:
    - student has a disability,
    - is the diagnosis
    - is what you need to know about this student, and,
    - is how you need to modify.

## ***Understanding ADHD***

- ❖ Students with attention deficit hyperactivity disorder (ADHD) fall into three groups. They may
  - be those students that are distracted by everything in the classroom.
  - pay attention to nothing.
  - have what we term a “combined type”.

The term ADHD covers all three of the above types.

- ❖ Children with ADHD may have a frontal lobe issue in that:
  - It causes a lack of behavioral inhibition.
  - They may not have that capability to think before speaking or acting.

## ***Behavior, Motivation, and Academics***

- ❖ When children sit in a class they consider boring and that they are not engaged in, they resort to misbehavior. We can avoid this by:
  - engaging the learner in something actively interesting, and,
  - managing our classroom.
- ❖ There are 11,000 statistical findings over fifty years of research that tell us the number one contributing factor to effective student learning is how we manage our classroom.
- ❖ Research tells us that by having control over your classroom management you can control your students’ learning.
  - Classroom management includes:
    - the way that you set up learning
    - the way that you create a classroom environment
    - safety, classroom community
    - the way that you create your expectations.
  - Expectations are:
    - what you want the students to do
    - what you want them to follow
    - what you want *them* to create in your classroom

- ❖ Harry Wong a leading expert on teaching strategies points out that the number one problem in the classroom is not discipline; it is the lack of procedures and the lack of routine.

### ***Teacher-Based Instructional Strategies***

- ❖ There are four ways that you can best modify or vary your teaching strategies. You can work with the:
  - content
  - process
  - products
  - learning environment
- ❖ When you have a task that is too large, a good example of a strategy would be to use “chunking”.
  - Take the task that you want the student to do, break it into smaller tasks, and make sure there is mastery before moving on to the next task.
- ❖ Vary instruction by:
  - using things like multimedia,
  - letting students work in groups, how they tell you what they know;
  - giving them choices,
  - employing projects, music, art,
  - allowing students to choose a method for assessment
    - Allow students to show knowledge gain by demonstrating what they have learned instead of responding to written tests.

### ***Adaptations of the Curriculum***

- ❖ Curricular adaptations provide students a way of processing information and also provides a means of telling us what they know.
- ❖ There are four broad categories of curricular adaptations. These include adapting the:
  1. instructional strategy;
  2. materials or actual curriculum content; and,
  3. instructional means

- ❖ There are nine specific areas in which adaptations can be made:
  1. size
    - You can change the size of the assignment.
  2. time
    - Students are given more time to:
      - ◆ process content.
      - ◆ respond to questions accurately
  3. due dates for assignments.
  4. the level of support that you give students on any assignment or project
  5. the input, - modifying the manner in which you give information to the students
  6. changing the level of difficulty
  7. changing the level of output
    - This will vary depending on the level and ability of the student. Allow his or her output and grade be based on what was observed during the week instead of a paper test.
  8. the level of participation
    - students will participate as much as you let them.
  9. an alternate or substitute curriculum based on their academic level
    - The student's IEP sheet should provide you with information related to specific modifications.
  
- ❖ Three additional methods will ensure good students learning. These include using:
  1. student interest,
  2. student choice, and
  3. graphic organizers in your classroom.
  
- ❖ Using student choice is found to be one of the most cost effective tools that you can use in engaging students in what you're doing. Let students choose:
  - which assignment or project they would like to do first.
  - the order in which they turn in their assignments or projects.
  - the topics they want to do their projects on.
  
- ❖ The second way that we are going to include interest is by asking them 'what is of interest to you' through an interest inventory. This provides you clues as to what these students are doing in their free time and it gives you something to talk about when they walk in the door. In addition it also lets the students know that you care about them.
  
- ❖ Graphic organizers will help students organize, classify, discern cause and effect, analyze, brainstorm, and remember information.

❖ Here are common things that you might see on a modification sheet:

1. using a timer with students
2. enlarging something so students can see it better
3. providing a pair of headphones to help the student minimize the distractions of a noisy classroom
4. changing the amount of work a student is doing

**Key questions that you as a CTE teacher can ask to ensure that you are meeting the needs of all your special needs students**

1. Do I have an understanding of what IDEA says about special needs students in CTE courses?
2. Do I understand my role in the IEP process and as a CTE teacher?
3. Do I understand what an IEP is and what it means if one of my students has an IEP?
4. Have I determined my beliefs about behavior management and do I have a plan in place to positively support classroom management?
5. Have I done everything possible to establish a classroom community that is a positive and safe learning environment?
6. Do all students feel included in our classroom community?
7. Is this my classroom or our classroom?
8. Are students actively engaged and do they enjoy learning in my classroom?
9. Am I organized, well prepared and ready to teach each day?
10. Have I thoughtfully created relevant lessons?
11. Is the lesson significant and interesting to the students?
12. Am I aware of the variety of needs of the students in my classroom?
13. Are my students given frequent, timely, positive, and encouraging feedback?
14. Are my students actively engaged in classroom learning?
15. Do I seek enough input from students when planning?
16. Do my students feel they can come to me and that I am interested in their learning?
17. And do I use a variety of strategies and techniques to avoid boredom and to meet the various needs of the students in my classroom?

## QUESTIONS AND ANSWERS

### **1. *What is IDEA?***

The Individuals with disabilities Education Act (IDEA) is a federal law that provides special education and related services for children with disabilities. The law provides for free and appropriate education for all children, based on individual needs and requires access to the general education curriculum. Each child receiving services has an individualized education plan (IEP).

### **2. *How do students qualify for services?***

Students may qualify under various disability categories and meet two criteria: a) diagnosis of a disability under IDEA and b) show an educational need.

### **3. *Why are students with disabilities in my regular education classroom and not in the special education classroom?***

The special education law now requires that students with disabilities receive access to the general curriculum, be involved in the general curriculum, and progress in the general curriculum. This coupled with the mandate that students be educated in the least restrictive environment now means that many students are educated in the general education classroom alongside their peers.

### **4. *What is the difference between an IEP meeting and an ARD?***

There is absolutely no difference. Texas happens to be one of the few states that refers to the IEP meeting as an ARD meeting. ARD is the acronym for Admission, Review, and Dismissal- the only three actions requiring a meeting. IEP stands for the Individual Education Plan.

### **5. *Who should be a part of the IEP/ARD team and meeting?***

The public agency must ensure that the IEP Team for each child with a disability includes:

- The parents of the child;
- Not less than one regular education teacher of the child (if the child is, or may be, participating in the regular education environment);
- Not less than one special education teacher of the child, or where appropriate, not less than one special education provider of the child;
- A representative of the public agency (who has certain specific knowledge and qualifications);
- An individual who can interpret the instructional implications of evaluation results and who may also be one of the other listed members;
- At the discretion of the parent or the agency, other individuals who have knowledge or special expertise regarding the child, including related services personnel as appropriate; and
- Whenever appropriate, the child with a disability.



In accordance with 34 CFR 300.321(a)(7), the public agency must invite a child with a disability to attend the child's IEP Team meeting if a purpose of the meeting will be the consideration of the postsecondary goals for the child and the transition services needed to assist the child in reaching those goals under 34 CFR 300.320(b).  
[34 CFR 300.321(a) and (b)(1)] [20 U.S.C. 1414(d)(1)(B)] ([www.idea.ed.gov](http://www.idea.ed.gov))

### ***6. What are my responsibilities as a regular classroom teacher related to students with disabilities?***

As part of the IEP/ARD team, you may be asked to attend the IEP/ARD meeting as the regular education representative and at the very least, you will provide input prior to the meeting related to the student.

As a member of that IEP/ARD team you will also be told or have access to the following information:

1. Your specific individual responsibilities related to implementing the IEP of the student; and
2. specific accommodations and or modifications that must be provided for the student.

### ***7. What all is included on an IEP?***

As used in Part 300, the term individualized education program or IEP means a written statement for each child with a disability that is developed, reviewed, and revised in a meeting in accordance with 34 CFR 300.320 through 300.324, and that must include:

- A statement of the child's present levels of academic achievement and functional performance...
- A statement of measurable annual goals, including academic and functional goals designed to:
  - Meet the child's needs that result from the child's disability to enable the child to be involved in and make progress in the general education curriculum; and
  - Meet each of the child's other educational needs that result from the child's disability;
  - For children with disabilities who take alternate assessments aligned to alternate achievement standards, a description of benchmarks or short-term objectives;
  - A description of:
    - How the child's progress toward meeting the annual goals described in 34 CFR 300.320(a)(2) will be measured; and
    - When periodic reports on the progress the child is making toward meeting the annual goals (such as through the use of quarterly or other periodic reports, concurrent with the issuance of report cards) will be provided;
- A statement of the special education and related services and supplementary aids and services, based on peer-reviewed research to the extent practicable, to be provided to the child, or on behalf of the child...

- A statement of any individual appropriate accommodations that are necessary to measure the academic achievement and functional performance of the child on State and district-wide assessments consistent with section 612(a)(16) of the Act; and if the IEP Team determines that the child must take an alternate assessment instead of a particular regular State or district-wide assessment of student achievement, a statement of why the child cannot participate in the regular assessment and why the particular alternate assessment selected is appropriate for the child....  
[34 CFR 300.320(a)] [20 U.S.C. 1414(d)(1)(A)(i)] www.idea.ed.gov

**8. What is the difference between IDEA and Section 504, often called “504?”**

<http://www.help4adhd.org/faq.cfm?fid=10&tid=34>

Section 504 of the Rehabilitation Act of 1973 requires public schools to provide accommodations to students with disabilities even if they do not qualify for special education services under IDEA. The definition of a disability under Section 504 is much broader than the definition under IDEA. All IDEA students are also covered by Section 504, but not all Section 504 students are eligible for services under IDEA. Section 504 states:

No otherwise qualified individual with a disability in the United States shall, solely by reason of her or his disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. [29 U.S.C. Sec. 794]

Examples of students who may receive assessment accommodations based on their 504 accommodations plan include students with

- communicable diseases (e.g., hepatitis);
- temporary disabilities from accidents who may need short term hospitalization or homebound recovery;
- allergies or asthma;
- drug or alcoholic addictions, as long as they are not currently using illegal drugs;
- environmental illnesses; or
- attention difficulties. ( [http://www.nichcy.org/toolkit/accommodations\\_manual\\_b.htm](http://www.nichcy.org/toolkit/accommodations_manual_b.htm))

**9. Assessment and Accommodations: Making it possible for students to show you "what they got." When do I use them and how do I use them?**

[www.education.umn.edu/nceo/TopicAreas/Accommodations/Accom\\_topic.htm](http://www.education.umn.edu/nceo/TopicAreas/Accommodations/Accom_topic.htm)

National Center on Educational Outcomes "Resources on testing accommodations, which are "changes in testing materials or procedures that enable students to participate in assessments in a way that allows abilities to be assessed rather than disabilities." This special topic area includes, among other things, an Introduction to Accommodations and an FAQ (Frequently Asked Questions). Find out what accommodations are, what categories they fall into, and when to make accommodations for a student with a disability. NICHCY

**10. What is the difference between a modification, accommodation, and an adaptation?**

Think of any type of change to the way you would traditionally carry out instruction and assessment as adaptations. Adaptations then fall into two categories: accommodations and modifications. Accommodations are adaptations (changes) in materials or procedures that provide access to instruction and assessments for students with disabilities. They are designed to enable students with disabilities to learn without the impediment of their disabilities, and to show their knowledge and skills rather than the effects of their disabilities. (Thurlow, M. (2002). Accommodations for students with disabilities in high school (Issue brief). *Examining current challenges in secondary education and transition (I)*1. Minneapolis, MN: National Center on Secondary Education and Transition.

Modifications are those adaptations (changes) that can be made to your curriculum, your instruction, your classroom environment or how you assess students. Through modification, you change what the student is expected to learn and show. Modification will alter the instruction level, the content of the course, and the performance criteria (Castagnera, Fisher, Rodifer, & Sax, 1998).

**11. What are some possible examples of modifications I might be responsible for making?**

The National Center for Learning Disabilities (2006) provides the following list of possible accommodations and modifications (<http://www.ldonline.org/article/8022>) Keep in mind these are but a few of the possibilities.

- Presentation:
  - audio tape
  - large print
  - reduce number of items per page or line
  - use a designated reader
  - present instructions orally
- Response:
  - allow verbal responses
  - allow answers to be dictated to a scribe

- use a tape recorder for responses
- allow responses to be recorded on computer
- allow answers to be recorded directly into test booklet
- Timing:
  - provide frequent breaks
  - provide allotted time for a test
- Setting:
  - utilize preferential seating
  - utilize special lighting or acoustics
  - utilize minimal distractions
  - small group setting
  - test in private room or alternative test site
- Test Scheduling
  - administer a test in several timed sessions or over several days
  - allow subtests to be taken in a order of choice
  - administer a test at optimal time of day
- Other
  - provide any reasonable accommodation needed that does not fit under the prior categories

**12. What is the difference between a learning strategy and a teaching strategy?**

Learning strategies are the approaches, tools, and strategies used by learners to carry out a task and to acquire, store, and express information related to that task. Teaching strategies are specifically based on need and effectiveness and are used by the teacher to deliver instruction. To vary instruction or deliver using multimodality of instruction means to use different methods of instruction, style, and to change the delivery method to meet the different learning styles and interests of students.

**13. What is assistive technology and how can the use of assistive technology increase the success of students with disabilities in their educational settings?**

Assistive technology is defined in IDEA as "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities." Some examples of assistive technology include Braille readers, wheel chairs, adapted computers, augmentative or alternative communication devices, and hearing aids. Also considered "technology" are tools such as graphic organizers that do not cost money, do not require complex manipulation, and research show them to improve learning.

Assistive technology devices and solutions provide wider access to the general curriculum for students with disabilities and can help foster feelings of independence.

**<http://www.cec.sped.org/AM/Template.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=5776>**

**14. What is meant by Modality of Learning?**

Possibly you have heard of the learning style of a student and this is the same. Essentially, a student's learning modality may well be one of the following modalities: auditory, kinesthetic, or visual. Once you have determined which modality is the one best suited to a student, you can better direct learning activities. During planning of lessons, if you are incorporating all three modalities, you will then cover all modalities needed by students. This is considered a best practice.

**15. What does it mean to differentiate instruction and must I do that?**

The Association for Supervision and Curriculum Development defines differentiated instruction as an "approach to teaching essential content in ways that address the varied learning needs of students with the goal of maximizing the possibilities of each learner." [www.ascd.org](http://www.ascd.org)

**16. One of my biggest challenges is getting students to turn homework in. What can I do?**

A recent study using a learning strategy to independently complete assignments suggests that doing so can give support to students with disabilities and they actually do better in school. The article includes useful information on homework and assignment completion strategies and how to instruct students to use them. See: Hughes, C. A., Ruhl, K. L., Schumaker, J. B., & Deshler, D. D. (2002). Effects of instruction in an assignment completion strategy on homework performance of students with learning disabilities in general education classes. *Learning Disabilities Research & Practice* 17(1), 1-18.

**17. What is the most important thing I can do to have a well managed classroom?**

"First, understand that behavior and classroom management are two different things. Behavior has to do with discipline. Classroom management has to do with procedures and routines." Harry Wong, <http://www.nea.org/classmanagement/hwong.html>

Please visit the toolbox for resources related to classroom management.

## PRE/POST TEST

1. Emerging trends impacting all regular education teachers include each of the following EXCEPT

- a move toward more specialized services and smaller settings for individual needs\*
- inclusion in and access to the general education curriculum and classroom
- expectations of higher level thinking skills and problem solving skills
- programs and plans all students based on mastery and outcomes

2. Effective classroom management if carried out appropriately is characterized through

- management of student behavior to ensure compliance
- providing necessary discipline to maintain control
- providing a safe environment conducive to learning\*
- rules and regulations that create order and control

3. Readyng the instructional environment for learning includes all of the following except

- providing clear expectations
- using structure and consistency
- setting up procedures and preparing to teach those procedures
- modifying all work for students with disabilities\*

4. Procedures, strategies, and instructional techniques teachers use to manage student behavior and learning activities are considered components of

- classroom management\*
- instructional management
- instructional readiness
- instructional design

5. Years of research support the finding that the number one factor in learning is

- the appropriate choice of curriculum
- the appropriate choice of teaching strategies
- the pace of the lesson
- how we manage our classroom

6. The number one problem in most classrooms today is

- a lack of procedures, routines, and expectations\*
- a lack of qualified teachers
- increasing discipline problems of students
- increasing number of students with disabilities in regular classrooms

7. Mr. Rodriguez strives to teach in a way that provides various ways for learners to receive or take in information. This means that he must present lessons in different ways. This is referred to as

- instructional design
- multimodality of instruction\*
- instructional planning
- versatility of instruction

8. Behavior has been linked to active engagement of learners. When learners are engaged, behaviors decrease and learning increases. All of the following are means of increasing engagement, except

- using interest of student to motivate learner
- offer choices in order of work and increase motivation.
- providing skill level curriculum only\*
- breaking tasks or requests into smaller pieces

9. Modification or accommodations for a student with disabilities may mean all of the following except:

- adjusting a grade to ensure a 70% or above mastery\*
- allowing additional time to complete assignments
- substituting materials with lower reading levels
- varying how students tell you what they know

10. All of the following are areas to modify teaching strategies except

- content
- process
- learning environment
- rate of instruction\*

11. The Individuals with Disabilities Education Act (IDEA) provides a free and appropriate public education for all students with disabilities and ensures

- a special education teacher to provide instruction
- instruction in a special education classroom free from distraction
- one on one instruction as necessary depending on need
- access to the general education curriculum\*

12. Recent changes in the special education law impact career and technology teachers in the following way/ways:

- CTE teachers may now be included on the IEP team
- CTE teachers may now be included in planning for the special needs student
- CTE teachers are increasingly likely to experience a wider variety and higher incidence of students with disabilities in the regular classroom
- CTE teachers are mandated by law to make modifications and accommodations prescribed in the IEP for students with special needs
- all of the above!\*

## ACTIVITIES

### Modification Template Activity Specific Task Adaptation

Use the following example and empty template to develop possible modifications for a CTE classroom or lab setting.

## ADVANCED ALGEBRA Introduction to the TI-82 Graphing Calculator

<b>Possible Difficulties with</b>	<b>Accommodations and/or Modifications</b>
Recognizing important keys	<ul style="list-style-type: none"><li>• Make the most commonly used keys tactile.</li><li>• Color-code the most commonly used keys.</li><li>• Provide a large print diagram of the face of the calculator that students can study and refer to when using the calculator. The diagram could contain notes for the student or be color-coded.</li></ul>
Remembering the steps involved when using the calculator for graphing, drawing, and programming	Provide the students with a cheat sheet. This sheet should provide directions which are sequential and numbered so that the students will be able to follow it easily. It should also contain vocabulary that the students understand.

## ASSESSMENTS

Allow students to use accommodations when demonstrating calculator

Chicago Public Schools <http://intranet.cps.k12.il.us/Lessons/Accommodations/>



## ADVANCED ALGEBRA

### Unit One: Relationships Between Sets of Data and Their Graphs (Linear Relations and Scatter Plots)

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Possible Difficulties with	Accommodations and/or Modifications
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Understanding the concept of linear	<ul style="list-style-type: none"><li>• Provide concrete examples. For example, create a graph on the floor of the classroom and, using students, construct a <i>human graph</i> by plotting students at various points on the graph.</li></ul>
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Creating graphs from sets of points	<ul style="list-style-type: none"><li>• Adapt graph paper so that it is color coded and/or tactile. The x- and y- axes should be depicted in different colors; the four quadrants should also be different colors.</li><li>• Provide the students with a cheat sheet indicating that the first number in an ordered pair tells how far right or left to go on the x axis and the second number tells how far up or down on the y-axis to go.</li></ul>
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Understanding the concept of slope	<ul style="list-style-type: none"><li>• Provide concrete examples (e.g., provide pictures of hills or stairs of varying steepness). Place something tactile such as a straw along the outer edge of a hill or stairs to represent the slope. Prepare a graph also constructed with straws, etc., representing the same slopes as in the diagrams.</li></ul>
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#### ASSESSMENTS

Allow students to use accommodations when demonstrating calculator

Modification Template Activity  
Specific Task Adaptation

Use the empty template to develop possible modifications for a CTE classroom or lab setting. Use tasks specific to the course you teach.

**YOUR COURSE**

**TASK**

**Possible Difficulties with      Accommodations and/or Modifications**

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**ASSESSMENTS**

Allow students to use accommodations when demonstrating calculator

## **Building Successful Partnerships**

- ❖ Collaborative partnerships are critical to the success of CTE.
- ❖ Partnerships should be established between CTE programs and:
  - business and industry leaders
  - community associates
  - parents
  - students
- ❖ State and federal laws have entrusted us with the responsibility to undertake collaborative partnerships between CTE and special education. The Carl D. Perkins vocational and technical education act, recently reauthorized in 2006, is our main federal guide.
  - Carl Perkins is the federal law that governs CTE in the United States, and certainly in the state of Texas we also fall under those guidelines.
  - The newest version of Perkins strongly encourages CTE programs to move towards instruction that is in line with current industry standards and certification requirements.
- ❖ The Texas Commissioner's Rules provide guidance on how the ARD process should work in regards to CTE. The Rules:
  - address collaborative partnerships
  - provide some legal impetus to ensure the presence of collaborative partnerships
  - recommend reaching out to agencies who would work with students with disabilities

### *ARD Committees*

- ❖ How can we accommodate special needs students who are entering high school? What supports can be put in place?
  - An ARD committee should be comprised of:
    - an administrator from the school district
    - a general education teacher
    - a special education teacher
    - a CTE teacher
    - evaluation personnel
    - counselors
- ❖ The members of the ARD need to understand the level of expectation that is held for the student who will be placed in the CTE program through the ARD.

- ❖ These questions need to be addressed in the ARD:
  - Is it appropriate to place the student into a particular program?
  - What do we need to provide for the student to be successful?
    - What accommodations?
    - What modifications?
    - What modified equipment?
  - What do we need to do to ensure that this student is going to be successful in a CTE program?

### *Advisory Committee*

- ❖ By law, all CTE programs should be evaluated annually.
  - The evaluation guidelines are available on the on the CTE page of the TEA website. <http://www.tea.state.tx.us/cte/Accountability/index.html>
  - An industry advisory committee meets with CTE program staff to assist in the evaluation and assessment of these programs.
- ❖ The membership of an advisory committee should include:
  - members of local businesses and industries
  - educators
  - a school board member (to keep the board informed on what is going on in current CTE programs)
  - parents of students who are members of special populations
- ❖ The advisory committee should be as demographically diverse as the community it serves
- ❖ The advisory committee should meet a minimum of twice a year; once in the fall and once in the spring.
  - In the fall, an initial meeting is held where data from the previous year is reviewed.
  - In the spring, the advisory members, our business and industry community partners, parents, and students meet and evaluate the CTE programs from the year.
- ❖ What if our CTE program does not have an advisory committee?
  - obtain the Handbook for Advisory Committees
  - utilize this book to form an industry based advisory committee
- ❖ The Handbook is available from IMS at Texas A&M University.

- ❖ There are some key questions that anyone involved in CTE or the ARD process should be asking. These include:
  - Do the programs teach industry standard skills?
    - Are the programs tied to industry standards?
    - How are we assessing our CTE programs?
    - How are we monitoring whether we are actually teaching these industry standards?
    - Are we monitoring and are we adjusting as we see a change in the workforce needs?
  - What is the focus of the CTE program?
    - Does the program focus on low-level entry skills or does it really focus on higher order-thinking skills that we know business and industry really need?
    - Does the campus monitor CTE achievement?
    - When we are looking at student achievement on a campus, is CTE included in that piece?
    - Are we really making sure that our students in CTE are achieving at the same rate, or hopefully at a higher rate, than we are achieving in the regular academic realm?
  - When you go into the classroom, what do you see instructionally?
    - Do you see a teacher driven lecture or do you see independent learners who have been given the background information, who have been given the resources, and where a teacher acts as a facilitator?
    - Does the CTE program lead to the opportunity for an industry-based license or certificate?
    - Does this program support regional workforce data or statewide workforce data?
    - Does the program provide the skills for the careers that are in my region or in my state?
    - Are our students required to create a product in CTE, and is this product reflective of the skills that we will see in business and industry?
  - How would our business and industry partners involved in the planning process for CTE?
    - Do they help plan the curriculum?
    - Do they provide the feedback for the curriculum to make sure that those industry skills are in there?
    - Do the business and industry representatives provide work-based learning opportunities for our students?
  - How will the school district face the challenges of providing a program that really is state of the art in industry standards?

## QUESTIONS AND ANSWERS

### ***1. How should a collaborative relationship occur in the ARD?***

This relationship should focus on a results-oriented process that has a coordinated set of activities to help the student meet their postsecondary goals, lends itself to looking very closely at the CTE courses, which are coordinated and sequential, for students whose postsecondary goal is to go into a specific trade or career path after graduation. There are several things that must be considered during this process. They include:

1. What does the student want to do after graduation?
2. What are the strengths, preferences, and interests?
3. Are CTE courses the appropriate route for the student?
4. How can students be accommodated and still achieve to industry standards?
5. How can CTE and Special Ed collaborate to meet the standards of each program?
6. Will all Sp Ed students be required to meet industry standards?
7. If not, how should this be handled?
8. What if it is possible to meet the standards but not at the same pace as others?

### ***2. Who should be present in the ARD?***

CTE teachers should be part of the process that develops IEPs for Special Ed students. If the teacher of record does not attend the ARD meeting they should be involved in the pre-planning for the curriculum to be taught through the IEP. Once the ARDC has written the IEP it is a legal document that must be followed so you want to make sure that you provide input into this process.

### ***3. Should business and industry representatives participate in curriculum planning? Work based learning? Accommodations and Modifications in the ARD?***

If appropriate, these representatives may participate in all the activities mentioned

### ***4. Should work based learning experiences for special population's students be tied to industry standards?***

If the ARD determines industry standard are appropriate for this student. Work-Based Learning (WBL) is an effective approach in delivering career and technical education and training to youth with disabilities. The WBL approach provides these services in community workplace settings rather than in conventional school environments. Because WBL activities take place in workplace settings, they must comply with the provisions of the Fair Labor Standards Act (FLSA) administered through the U.S. Department of Labor and state labor laws. The determination should be based on the individual student's needs, taking into account the student's preferences and interests. WBL would be considered a major change in placement for most students and would require a change in the IEP. The education agency must invite the student to any meetings considering transition services or participation in work-related training.

### ***5. Please describe how CTE Teachers can meet the needs of special education students in CTE programs***

Career and technical education has long been an option for preparing youth with disabilities for productive employment. However, most of these programs in the past

relied heavily on simulated work experience in classroom settings. This approach has not led to productive employment in integrated work environments for many students. In fact, the outcome often has been sheltered employment in segregated work settings. The skills acquired through classroom or simulated work experiences do not generalize to typical work settings, and therefore do not meet the goal of post school productive employment for youth with disabilities. When career and technical education and training occur primarily through classroom or simulated settings, youth with disabilities do not acquire social skills normally built through interactions with colleagues and coworkers. These skills are critical to long-term employment success. CTE WBL experiences are an excellent way for teachers to help students with disabilities connect the ‘why’ of education to the ‘how’ of education.

***6. Should CTE programs focus solely on entry level skills, or should it provide all students, including special populations, with a working knowledge of all aspects of industry?***

CTE programs should lead to knowledge of all aspects of industry. The ARDC will help determine what is appropriate for students with disabilities.

***7. Describe a good working relationship with the CTE program.***

If the teacher of record does not attend the ARD meeting they should be involved in the pre-planning for the curriculum to be taught through the IEP. Once the ARDC has written the IEP it is a legal document that must be followed so you want to make sure that you provide input into this process.

***8. How important is it to have a CTE representative in the ARD?***

Again, CTE teachers should be part of the process that develops IEPs for Special Ed students. It is critical to have a CTE rep in the ARD when considering students for initial or continued placement in CTE courses. This way all parties can agree on the possible outcomes expected of the CTE experience

***9. Describe how the CTE teacher can help special populations students become independent learners?***

- Find out what the students learning strengths are; their individual learning styles
- Teach according to those strengths to show the students how they learn
- Teach using a variety of methods/interventions in order to strengthen other learning styles; EX – a student may not work well independently, but still have independent activities along with group, working with peers, working with the teacher. This allows the student to have chances for success which makes them more confident to work in a way that isn’t their style
- Teach on grade level, but instruct in a variety of ways

***10. How should the CTE teacher find out about the modifications and accommodations for their students?***

You should always get copies at the beginning of the course of the accommodations. If there are curriculum modifications you should receive an IEP that specifies what the student is to be taught.

***11. How should industry standard taught in CTE impact the placement of special population's students into the program?***

The ARDC will determine if the student should meet industry standards or learn only the basics of the course.

***12. How should the CTE program support skills for regional and state labor market needs?***

The Local Advisory Committee should have input into the evaluation and planning for CTE programs. Included in the evaluation data should be information about the needs of local businesses and industry as well as regional job opportunities and projected growth in different career areas statewide.

***13. Should all students, including special population's students, required to do projects?***

If the course requires projects, it is up to the ARD to determine what the student will be required to do. Many Sp Ed students do extremely well with hands-on learning.

***14. What role should special populations teachers (ESL, Special Education, etc.) play in assisting CTE teachers maximize instruction? What role should they be expected to play as experts in their field in assisting those who are experts in career training- in a true partnership agreement?***

Some suggestions:

- Insure that a CTE representative is present for the ARD
- Provide materials for the CTE teacher aide if one is available to the CTE teacher when circumstances warrant
- Provide local professional development in effective instructional strategies for CTE special population's students for CTE staff (and all teachers)

***15. What are the challenges a district faces in assuring all students, including special population's students, receive an industry standard education in CTE?***

Everyone needs to "think outside the box" when making decisions about how to handle the CTE classes for students with disabilities. For example:

1. Could the student master the industry standards of given more time to do so?
2. Could the student be given more time to master those standards? EX: 2 years to complete a 1 year class? How would this look?
3. If the student is not going to master all the industry standards, how will it look on the IEP? What would be the identified skill exit point for the student?



## PRE/POST TEST

1. Which question should be addressed in the ARD?

- What are the student's strengths, preferences, and interests?
- Are CTE courses the appropriate route for the student?
- How can students be accommodated and still achieve to industry standards?
- All of the above\*

2. Who should be present in the ARD?

- Special Education staff only
- Special Education staff and parents only
- A campus administrator, Special Ed staff, parents and students
- CTE teachers should be part of the process if students are to be considered for placement in CTE\*

3. If the CTE Teacher cannot attend the ARD, what should occur?

- They should sign the IEP after the ARD has occurred
- Allow the academic representative to make recommendations
- If the teacher of record does not attend the ARD meeting they should be involved in the pre-planning for the curriculum to be taught through the IEP. \*
- Deny access to the CTE program

4. Should work based learning experiences for special population's students be tied to industry standards?

- No, it is an unrealistic goal for the student
- Yes, if the ARD determines industry standard are appropriate for this student\*
- Only if the CTE approves
- Only if the student tests high enough on an interest inventory

5. How important is it to have a CTE representative in the ARD?

- It is not critical or required
- Only if the CTE teacher has time to attend
- It is critical to have a CTE rep in the ARD when considering students for initial or continued placement in CTE courses\*
- None of the above

6. The inclusion of a CTE representative in the ARD is supported by:

- IDEA
- TEA Commissioner's Rules\*
- Both

None of the above

7. Describe how the CTE teacher can help special populations students become independent learners.

- Find out what the students learning strengths are; their individual learning styles
- Teach according to those strengths to show the students how they learn
- Teach on grade level, but instruct in a variety of ways
- All of the above\*

8. How should the CTE teacher find out about the modifications and accommodations for their students?

- When the special education teacher brings the IEP for the teacher to sign
- You should always get copies at the beginning of the course with the accommodations
- If there are curriculum modifications you should receive an IEP that specifies what the student is to be taught
- B and C\*

9. How should industry standard taught in CTE impact the placement of special population's students into the program?

- They are too rigorous and should not be taught
- They should only be considered for 'high functioning' students
- The ARDC will determine if the student should meet industry standards or learn only the basics of the course. \*
- None of the above

10. What role should special populations teachers (ESL, Special Education, etc.) play in assisting CTE teachers maximize instruction?

- Insure that a CTE representative is present for the ARD
- Provide materials for the CTE teacher aide if one is available to the CTE teacher when circumstances warrant
- Provide local professional development in effective instructional strategies for CTE special population's students for CTE staff (and all teachers)
- All of the above\*

## ACTIVITY

Document needed:

**Program Advisory Committees Handbook**

**URL:** <http://www-ims.tamu.edu/docs2/ProgramAdvisoryCommittees.pdf>

### **Activity:**

**Divide participants into equal groups. Assign each group a section of the Program Advisory Committees Handbook:**

**Why Involve Business and Industry in Education?**

..... 1-5

*Levels of Business/Industry Involvement*

..... 3

**Organizing and Using Business/Industry Advisory Committees**

..... 6-25

*Preliminary Planning*

..... 9

*Objectives and Activities of a Business/Industry Advisory Committee*

..... 10-12

*Selecting and Recruiting Members*

..... 12-15

*Activities for First and Second Meetings*

..... 16

*Committee Operations*

..... 17-23

*Recognition of Committee Members*

..... 23-24

*Questions and Answers*

..... 25

**Each group should select a recorder and a reporter. Allow participants 10 to 15 minutes to read their assigned section and record the critical point. At the end of the allowed time, each group will report their findings back to the whole group.**

### **Supplies needed:**

**Marker board and markers**

**Highlighters**

**Copies of Advisory Handbook**

## **Career Guidance: Tools for Practical Applications**

### ***Basic Employability Skills***

- ❖ What are employers looking for in the individuals they are about to employ?
- ❖ Employers are interested in workers who possess basic skills such as:
  - showing up for work
  - showing up to work on time
  - effective communication skills
  - relevant math skills
  - the ability to productively work cooperatively with others and in teams
- ❖ The National Collaborative on Workforce and Disability for Youth
  - published its report in 2005
  - recommended that all youth have access to multiple assessment batteries
- ❖ The specific career-related characteristics that we need to assess are:
  - Interests
    - What are your student's preferences?
  - Aptitudes
    - Does the student have a true potential for success, either through training or employment?
  - Work values
    - What does your student value?
    - Does your student value creativity, recognition, working under deadlines or would they prefer to work at their own pace?
  - Students' beliefs and rationalizations
    - Beliefs such as: "I don't need a job, I can just find one if I decide to" could impede your student's progress.

### ***Appropriateness & Comprehensiveness:***

- ❖ Two key concepts to remember to ensure successful student career assessment:
  - appropriateness of the assessment package, and
  - comprehensiveness of the assessment package

- ❖ **Comprehensiveness:**
  - The package needs to assess several unique characteristics that may affect a student's career success. These include:
    - student interests
    - individual personality traits
    - a student's value systems
    - a variety of aptitudes
    - different career development issues
  
- ❖ **How can you determine "appropriateness"?**
  - evaluate the assessment tool technical manual that often accompanies any assessment tool
  - identify the norming procedure
    - A norming procedure essentially means that they took the test and administered it to several different students so that we would have comparable scores.
    - Comparing a student's scores to that of peers similar in age, ethnicity, gender, socio-economic background etc. ensures that the procedure is appropriate and fair for all students.

### ***Norming for Students with Special Needs***

- ❖ Typically, norming is not conducted on students with special needs.
  
- ❖ How do you ensure that you have appropriate tools for all your students?
  - Administer the tool to your current group of students and create 'local norms'.
  - You are then comparing one student to the rest of his or her class who are probably similar to him in age, ethnicity, and other pertinent information.

### ***Assessment Tools***

- ❖ There are different sources of information available to you today so that you can select a comprehensive and appropriate package for your students with and without disabilities.
  
- ❖ The textbook, *Psychological Testing* by Anastasi and Urbina, the seventh edition, goes into great detail about norming procedures, reliability and validity, and all of the issues that are essential to ensure appropriateness.
  
- ❖ *Using Assessment Results for Career Development*. This book addresses what is available today when it comes to career assessment, and how you can administer, interpret, and score these assessment tools appropriately for your students.
  
- ❖ *The Counselor's Guide to Career Assessment Instruments* goes into great detail and presents reviews of different career assessment instruments that exist today.

- ❖ The *Planning Career Goals* packet is an example of a comprehensive assessment tool. It includes three measures.
  - The first measure is the ability measure, and this is the measure where we examine the student's skill levels and the potential they have for success in training or employment in a certain career area.
  - The second tool is information measures. This measure how much your student already knows when it comes to career planning, and what else he or she would need to know so that they can move on and become a success.
  - The third aspect is the interest inventory, which is very important for any career assessment packet. The interest inventory looks at vocational preferences and makes sure that you place your student or give to them those opportunities in which they are most interested.
- ❖ Finally, every good comprehensive packet should include an examiner's manual or administrator's instruction manual and a counselor's manual. The examiner's manual makes sure that you administer the assessment tool in a manner in which is appropriate, standardized, and fair for all students. And, the counselor's manual ensures that you interpret the scores in an accurate manner.

Examples of interest inventories:

- ❖ The *COIN Package*
  - appropriate for all grade levels
  - is available in English and Spanish
- ❖ The *Self Directed Search*
  - enables fitting your students' personality to a specific environment to ensure career success
- ❖ The *Strong Interest Inventory*
  - compares your student to occupations, and then decides what occupation suits your student the best.

Examples of Aptitude measures:

- ❖ *Differential Aptitudes Test Battery*
- ❖ *Armed Services Vocational Aptitude Battery*
- ❖ Examples of skill sets measured by these tests include:
  - numerical reasoning
  - spatial reasoning
  - abstract reasoning
  - verbal reasoning

Examples of personality inventories:

- ❖ *16 PF*
- ❖ *Myers Briggs Type Indicator*

Examples of Values Scales:

- ❖ *Minnesota Importance Questionnaire*

- ❖ *Values Scale*  
Examples of career issues assessment tools:

- ❖ *Career Beliefs Inventory*
- ❖ *Career Decision Scale*
- ❖ *Career Attitudes and Strategies Inventory*
- ❖ *Career Factors Inventory*

### ***Creating a Card Sort***

- ❖ A vocational card sort is a tool utilizing cards with occupations or work values listed to determine career interests
- ❖ Card sort task options:
  - Option One
    - utilize a commercially available card sort
    - your students pick whether they like, are neutral towards, or dislike the labeled occupation
    - ask students to rank order the careers they put under “like”
  - Option Two
    - use a commercially available card sort
    - force choice students to pick five out of all the cards
  - Option Three
    - build your own card sort using Microsoft Word/Powerpoint
    - remember to use an increased font size for the visually impaired
  - Option Four
    - Utilize pictures instead of words to depict occupations and work values
  - Option Five
    - use a word to depict an occupation and include outlook information regarding that occupation right on the back of that card.
    - a reference website is provided in the toolbox with information that can be customized to Texas

### ***Internet Resources***

- ❖ Career Assessment Internet resources:
  - *CPP inc.*
  - *Psychological Assessment Resources*
  - *Pearson Assessment*
- ❖ Test locators available through university websites or public library systems:
  - *Burrows*

- *Silver Platter*
- ❖ Interest inventories available on-line:
  - *Strong Interest Inventory*
  - *Kuder Career Planning System*
  - *Self-Directed Search*
- ❖ Personality inventories available online:
  - *Myers Briggs Type Indicator*
  - *Keirsey Temperament Sorter*
- ❖ Aptitude inventories available online:
  - *Differential Aptitude Test Battery*
  - *Arms Services Vocational Aptitude Battery.*
- ❖ Comprehensive, computer-guided systems online are available online. Components of the systems include:
  - an interest inventory
  - a work value scale
  - an aptitude inventory
  - an extensive student profile based on occupational and educational choices is generated.
    - Examples include:
      - *SIGI 3*
      - *Discover*
      - *Choices*

### ***CACE Survey***

- ❖ The CACE (Career Aspirations Career Expectations) survey is:
  - ideal for classroom use and designed for administration to groups of four hundred or more
  - a one-page document
- ❖ The two most important questions in the CACE survey are:
  - “What would you like to be when you grow up if there were absolutely no barriers, no challenges, the sky is the limit, you can do whatever you want to do?”
  - “What career would you like to pursue if you couldn’t pursue the one you just named in the pervious question?”
- ❖ CACE Administration Procedures:
  - train parents, volunteers, coworkers, [or] fellow teachers to administer the CACE survey by administering the survey to them
  - then give the actual survey to the students
  - Remember to identify the two central questions and make sure students understand the difference between career aspirations – what do you want to be



when you grow up if there are no barriers—and career expectations – if you do encounter barriers what career would you like to pursue?

- ❖ The survey may be modified by including or removing questions to suit your specific needs as long as the CACE questions are included.
- ❖ The survey may be modified for use with students who have special needs. Specifically, those modifications could include:
  - administering it orally
  - having someone help the student respond to it
  - allowing the student could take the survey home to allow more time
  - allowing parents to have the opportunity to assist students with completing the survey
  - using a larger font
  - administering it on the computer
- ❖ Whichever approach you use to career assessment we want to you to ultimately match your students to career clusters.

### ***Career Clusters***

- ❖ Career clusters are federally developed occupational categories. In Texas 16 such clusters are recognized.
- ❖ The ultimate goal is to match your students with a Career Cluster that is most appropriate for them.
- ❖ A Career Cluster has a prescribed curriculum from eighth grade to twelfth grade.
- ❖ Core courses as well as electives will allow your student to take and ensure a certification, or a qualification within a Career Cluster.

### ***Career Assessment: Keys to Success***

- ❖ Four specific components for success are:
  - a school-wide approach to career assessment
  - a student centered assessment program
  - involving business and industry in the design of your program
  - infusing employability skills into your daily curriculum as much as possible

## QUESTIONS AND ANSWERS

### ***1. What employability skills are employers looking for in their new employees?***

Employability skills are those basic skills necessary for getting, keeping and doing well on a job. Employers now seek for their employees to possess employability skills in addition to academic qualifications. Employability skills, while categorized in many different ways, are generally divided into three skill sets: (a) basic academic skills, (b) higher-order thinking skills and (c) personal qualities. The three skill sets are typically broken down into more detailed skill sets.

<b>Basic Academic Skills</b>	<b>Higher-Order Thinking Skills</b>	<b>Personal Qualities</b>	
Reading Writing Science Math Oral Communication Listening	Learning Reasoning Thinking Creatively Decision Making Problem Solving	Responsible Self Confident Self Control Team Player Honest Integrity Adaptable and Flexible	Team Spirit Punctual and Efficient Self Directed Good Work Attitude Well Groomed Cooperative Self Motivated

### ***2. What is career assessment?***

Career assessment is a process that provides useful information and experiences, beginning in elementary school and continuing through adulthood that will assist an individual to develop educational plans to reach goals and develop skills related to employment and community living (i.e. employability skills). Career assessment provides an ongoing, individual-centered monitoring of skills or aptitudes, interests, and values related to functioning in work, home and community positions, and encompasses all individual assessment practices including: (1) psychological and educational assessment, (2) functional living skills assessment (home and community), and (3) vocational assessment (work).

### ***3. Why should we consider the results of career assessment?***

According to the National Collaborative on Workforce and Disability for Youth (2005), in order to perform at optimal levels in all educational settings, all youth need to participate in educational programs grounded in standards, clear performance expectations, and graduation exit options based upon meaningful, accurate, and relevant indicators of student learning and skills. One such option is ensuring that youth have access to an assessment system that includes multiple measures. In addition, the Collaborative also emphasizes that career preparation and work-based learning experiences are essential in order for youth to form and develop aspirations and to make informed choices about their careers. A method by which to achieve this is to conduct career assessments to help identify students' school and post-school preferences and interests.

### Career Assessment Definitions:

*Interest:* The existence of a strong preference, attention, or curiosity about some occupational, vocational, or career-related activity or area.

*Aptitude:* A combination of abilities and other characteristics, whether native or acquired, that is indicative of an individual's ability to learn or develop proficiency in some particular area if appropriate education or training is provided.

*Work Value:* The goal or objective sought through work-related behavior, for e.g. recognition, status, money, social support etc.

*Personality:* Refers to an individual's emotional make-up and stability. Such traits as anxiety, sociability, assertiveness, leadership skills, extroversion or introversion can either enhance or impede career progression.

#### *Career Development Issues*

*Career Beliefs:* Career beliefs are assumptions people make about themselves and what they must do to succeed in the world of work.

*Career Maturity:* Career maturity is defined as having definite career choices, making consistent choices over time, and making choices that are realistic.

#### **4. What makes a career assessment package successful?**

Career assessments are typically successful if they meet two key criteria:

*Appropriateness:* A career assessment tool must be used only if it was designed for and is suitable (norming – refer to Q5) to the students being assessed on the basis of age, gender, ethnicity and grade level.

*Comprehensiveness:* There are multiple factors that contribute towards or may slow down successful career progression/development among all individuals. Interests in a certain profession may not be enough to build a career upon because the individual in question has skills sets and personality traits suitable for other careers. A comprehensive career guidance system will enable counselors and teachers to discern compatibility among interests, aptitudes, personality traits, work values and career development issues upon which their students' careers may be based.

#### **5. What is norming?**

Norming is the process of developing statistics or tabular data that summarize the distribution of test performance for one or more specific groups, typically test takers of various ages or grades. Norms are usually designed to represent some larger population, such as test takers throughout the country. The group of examinees represented by the norms is referred to as the reference population.

#### **6. How are career assessment instruments scored?**

Most published career assessment tools will be accompanied by a technical manual. The text in the technical manual will provide you with information on how the instrument was developed, normed and what scores were used to interpret results. The norming tables will be published at the back of the manual and instructions will be provided on how a student's obtained score (also known as a "raw score") should be interpreted. To ensure fairness, the tools' raw scores are standardized (based on a single mean and standard

deviation), i.e. can be interpreted as “average”; “above average” or “below average” or another similar scale. Raw scores are also mathematically converted into standard scores. Typical standard scores that can be seen in a technical manual include:

*Grade Equivalent Scores:* The school grade level for a given population for which a given score is the median score in that population. Grade Equivalent scores are useful primarily because of three characteristics: 1) they indicate the developmental level of the pupil's performance, 2) they may be averaged for the purpose of making group comparisons, and 3) they are suitable for measuring growth. For example, if a student obtains a grade equivalent score of 6.3 on a math test we would say that his raw score is equivalent to the average raw score obtained by students in the norm group who were in their third month of the sixth grade.

*Percentile Rank:* A test score that is used to convert raw scores (number of correct answers) into something more meaningful. Percentile rank is the percentage of test takers who had a raw score that was the same as or higher than a given score. If a student received a raw score of 15 on a test and this put the student in the 75th percentile, it would mean that the student had a higher score than 75% of those who take the test.

*Stanine Scores:* Stanine scores are normalized standard scores with a range of 1 to 9, a mean of five, and a standard deviation of two. The first stanine is the lowest scoring group and the 9th stanine is the highest scoring group.

### ***7. Are there career assessments available for students with special needs?***

Commercially available career assessment packages can be used for students with special needs when administered with appropriate accommodations. For e.g.

1. Items are administered orally (in other languages if necessary).
2. Extra time is given.
3. Allowing for parents to aid in administration (at home or at school).
4. Using a magnifying glass or larger font for students with visual impairment.

Administrators need to be aware that most commercially available instruments are not normed on students with special needs. Developing local norms may have to be considered as an alternative solution (refer to the Career Guidance: Tools for Practical Applications module for more information).

- Using a technique such as a card-sort exercise or adapting the CACE survey is also recommended (refer to the Career Guidance: Tools for Practical Applications module for more information).
- Use career videos instead of pictures and words to determine students' interests. Free career cluster-related videos are available online at [http://www.careerinfonet.org/videos/COS\\_videos\\_by\\_cluster.asp?id=,27&nodeid=28](http://www.careerinfonet.org/videos/COS_videos_by_cluster.asp?id=,27&nodeid=28)
- Use computer guidance assessments available at [www.ioscar.org](http://www.ioscar.org) for an online work values card sort game.

**8. Where can I go to find career assessment instruments or the Career Aspirations and Career Expectations (CACE) survey?**

Refer to the toolbox that is available on the CTSP site –  
[http://ctsp.tamu.edu/videos07/toolbox/career\\_guidance](http://ctsp.tamu.edu/videos07/toolbox/career_guidance)

**9. I have administered the assessments and obtained the students' results. Now what?**

We recommend that you now match your students to career clusters. A federally recommended model, the career clusters provide a way for schools to organize instruction and student experiences around broad categories that encompass virtually all occupations from entry through professional levels. Salient features include:

- Career exploration through career assessment within the cluster structure allows students to match their interests, skills, and education requirements with possible careers.
- The cluster model identifies knowledge and skills that are needed in the workplace.
- This knowledge and these skills are tied to standards and curriculum to better prepare students. Core courses and electives are provided in the 9<sup>th</sup> grade through 12<sup>th</sup> grade and throughout the curriculum.
- By providing the links between school and the workplace, students understand the relevancy of what they are learning.

In Texas, 16 career clusters are identified and recommended for use in schools by the Texas Education Agency. Refer to <http://www.achievetexas.org> for more information.

**10. What post-secondary options are available to my students with special needs?**

A student-centered career assessment program that receives school-wide support and that was developed on the basis of industry standards can lead to success for students in various post-secondary arenas including:

1. Licensure or certification
2. Apprenticeships
3. Associate Degrees
4. Tech Prep or two-year community college with articulation into -
5. Four-Year Colleges

**11. I don't have time to do all this extra work related to career assessment. What can I do?**

Consider infusing employability skills into your classroom curriculum.

1. Use group assessment sessions where possible.
2. Utilize contextual learning experiences to infuse workplace learning into classroom learning experiences.
3. Incorporate worksite learning opportunities, e.g. field trips.
4. Provide students with current labor market information.
5. In addition to counselors utilize teachers, other school personnel, business/industry representatives and mentors to provide career guidance information.

6. Expand the range of resources for career guidance information by making optimal use of the World Wide Web and additional computer-based packages.
7. Develop ways of exposing students of both genders to a wider range of occupational options.
8. Utilize curriculum-based assessments for developing career guidance plans. The term curriculum-based assessment (CBA) simply means measurement that uses direct observation and recording of a student's performance in the local curriculum (i.e. measures basic skills) as a basis for gathering information to make instructional decisions.

***12. What about my students who are interested in non-traditional careers? How can I help them?***

Nontraditional Occupations (NTOs) are jobs in which 25 percent or less of the workforce is of one gender (U.S. Department of Labor). Using the techniques we describe in the Career Guidance: Tools for Practical Applications module, you can encourage your students to pursue non-traditional careers. However, provide them with the following information so that they may be aware of the pros and cons of choosing a non-traditional path.

**Positives:**

1. The biggest advantage of working in a non-traditional career is the intrinsic benefit of following your dreams and the **satisfaction that comes from the empowerment** of a job done well.
2. One of the other benefits -- but also potentially one of the cons -- is that people in non-traditional jobs will **receive more attention**. If you are doing well, that attention is generally good because all workers want to be recognized for their hard work (although the attention could raise jealousy issues among co-workers), but if you are struggling a bit, that attention will simply amplify the problems and add to the pressure to perform.
3. Another pro of non-traditional careers is their **impact on society**. No one gender has a lock on any occupation, and workers who are some of the first of their gender to succeed in a career **open the door to others**.
4. For women, an advantage is that the **pay is typically much higher** in careers where men dominate; thus, you'll have the potential to make more money in a non-traditional career.
5. For men, a benefit is that you are often **given positions of responsibility sooner**, because, fairly or not, men are often seen as having natural leadership and other key skills.

**Potential Negatives:**

1. The biggest disadvantage is the **lack of enough mentors** in non-traditional careers. Mentors, people in higher positions within your career field, are critical to your success as they can guide you, protect you, and help you along in your career.

2. A con is the **potential negative feelings** from co-workers, especially for female workers in a traditionally male career. You can be seen as taking the "spot" reserved for a colleague, or worse, a token worker hired to avoid lawsuits or appease special-interest groups. And in the worst case scenario, these negative attitudes can lead to **sexual harassment**.
3. A negative is also the potential to have **little or no support from family and friends** who may question your motives for entering a more challenging career -- or who simply don't understand the pressures and problems you face in a non-traditional career.
4. Finally, in certain traditionally male careers, the physical part of the job can be very demanding, so a disadvantage for women is that some non-traditional careers impose both mental and **physical challenges that may be overwhelming**.

## PRE/POST TEST

1. Higher-order thinking skills; academic skills and work-related skills are collectively called:
  - Employability Skills\*
  - Aptitudes
  - Work Preferences
  - Work Values
  
2. The tests that measure potential for success through training or education are called:
  - Personality tests
  - Interest tests
  - Aptitude tests\*
  - Career Belief tests
  
3. “I will be successful in any job as far as I get an interview” is an example of:
  - A personality trait
  - A skill set
  - A work value
  - A career belief\*
  
4. Jane desires recognition and status from her career and wants a job that is fast paced and challenging. What assessment did we administer to her so that we could arrive at this information?
  - An aptitude inventory
  - A personality inventory
  - A values scale\*
  - None of the above
  
5. The process of administering the test to thousands of test-takers to collect comparable scores is called:
  - Standardization
  - Norming
  - Both a and b\*
  - None of the above
  
6. For students with special needs it is best to score tests on the basis of:
  - Norms’ tables at the back of the manual
  - Teacher-developed local norms
  - Teacher-developed individualized tests
  - Both b and c\*



7. The CACE survey can be administered:
- Individually
  - To a large group
  - By a parent, volunteer to both small and large groups
  - All of the above\*
8. Key criteria for a successful career assessment package include:
- Comprehensiveness
  - Appropriateness
  - Both a and b\*
  - None of the above
9. Using a career assessment tool that has norms for African-American females aged 16 and above for measuring the interests of:
- African-American males aged 16 and above is inappropriate.
  - Caucasian females aged 16 and above is inappropriate.
  - Both a and b\*
  - Only a
10. Teachers can seek the help of the following for help with providing career guidance to their students:
- Counselors
  - Parents
  - Education Service Centers
  - All of the above\*
11. The state of Texas recognizes \_\_\_\_\_ career clusters.
- 15
  - 14
  - 16\*
  - 20
12. Career clusters are defined as:
- Course pathways
  - Career choices
  - A grouping of occupations and broad industries.\*
  - None of the above.

## ACTIVITIES

1. Break participants into smaller groups and discuss career assessment strategies that work for them. A notes-taker or volunteer can then present the “best practices” to the rest of the group.
2. Break participants into smaller groups and discuss accommodations and modifications in evaluation strategies that work for them. A notes-taker or volunteer can then present the “best practices” to the rest of the group.
3. Administer the CACE Survey to the group and practice sorting the results according to career clusters.
4. Ask for suggestions on adapting the CACE Survey and card sort techniques for students with special needs.
5. Break participants into smaller groups and infusing employability skills into the curriculum strategies that work for them. A notes-taker or volunteer can then present the “best practices” to the rest of the group.

## EXAMPLE OF WORKSHOP EVALUATION

### Part I

Please indicate your level of agreement/disagreement with the following statements.  
**(sd=strongly disagree, d=disagree, u=undecided, a=agree, sa=strongly agree)**

1. The information was accurate.	sd	d	u	a	sa
2. The information was presented in a professional manner.	sd	d	u	a	sa
3. The modules are informative and easy to follow.	sd	d	u	a	sa
4. There were no inconsistencies in the information presented.	sd	d	u	a	sa
5. The information was comprehensive.	sd	d	u	a	sa
6. The presentation flowed well.	sd	d	u	a	sa
7. The presenters were credible.	sd	d	u	a	sa
8. The information was highly relevant to CTE teachers.	sd	d	u	a	sa
9. The visuals were of high quality.	sd	d	u	a	sa
10. The video was of high quality.	sd	d	u	a	sa
11. My time watching the instructional modules and attending this workshop was well spent.	sd	d	u	a	sa
12. The video modules provided enough reviews/recaps of the materials presented.	sd	d	u	a	sa
13. The video adequately takes the place of a live presenter.	sd	d	u	a	sa
14. I would enroll in online courses based on these modules when offered.	sd	d	u	a	sa

Note: Please turn page over for Part II

## Part II

What additional resources should be available with the instructional module?

If there were inconsistencies in the video, what were they?

What was the strongest aspect of the video modules?

What was the weakest aspect of the video modules?

What format would you be most apt to utilize: streaming video online or DVD?

What other instructional module topics do you believe would be useful to CTE teachers?