GUIDE TO **UNIVERSAL DESIGN FOR LEARNING** IN

MANAGEMENT & ENTREPRENEURSHIP

Driving Business Success Across All Industries

CTE TECHNICAL ASSISTANCE CENTER OF NY

ABOUT THIS GUIDE

Universal Design for Learning (UDL) is a framework for designing learning experiences that are inclusive, accessible, and engaging for all students. UDL is not a checklist of required practices, but a mindset of continuous improvement. By increasing flexibility and options, UDL helps teachers proactively remove barriers, meet students where they are, and provide everyone with an equal opportunity to learn.

This document is part of a series that illustrates how UDL principles can be applied in each of Advance CTE's 14 career clusters. The series extends and tailors the tips provided in two prior publications, Supporting All Students in New York State CTE Programs [PDF] and Supporting Special Populations in New York State CTE Programs [PDF], available on the CTE TAC's website.

Photo: BT BOCES New Visions Business Academy

With its emphasis on relevant, authentic, hands-on learning, UDL is a natural fit for CTE classrooms!

5 REASONS WHY UDL WORKS FOR CTE MANAGEMENT & ENTREPRENEURSHIP

1. UDL offers **flexible means to achieve common goals**. As they forge their own paths, tomorrow's business leaders discover that there can be many ways to address complex problems and multiple routes to success.
2. Business skills can be applied in nearly any occupation, subject area, or industry. Through **self-directed learning**, UDL broadens the range of perspectives and career paths students can explore.
3. UDL provides a **supportive and adaptable learning environment** that encourages risk-taking and innovation, essential skills for success in the business world.
4. By experiencing different perspectives, communication methods, and ways to represent information, students gain insights into how they can **better meet the needs of diverse customers and clients**.
5. **Authentic, hands-on learning** allows students to apply course content to real-world scenarios, helping them become career-ready.

QUICK REFERENCE GUIDE TO UDL FOR CTE

Universal Design is the process of creating objects, environments, and experiences that can be accessed, understood, and used to the greatest extent possible by people with a wide range of abilities, needs, and characteristics. Universal Design for Learning (UDL) applies the concept of Universal Design to learning contexts.

UNIVERSAL: UDL is a framework for **creating learning experiences that work for *everyone***. Proactively identifying and removing barriers to learning creates a more inclusive environment where all students have equitable opportunities to learn.

DESIGN: There is no one approach to learning that is optimal for every student in every situation. The UDL principles guide teachers to **plan for learner variability by offering flexibility and options**.

FOR LEARNING: Rather than a one-size-fits-all approach, **UDL empowers students to tailor the learning experience** for their individual needs, goals, and preferences. By discovering how they learn best, students develop into self-directed, resourceful, and skillful learners.

THE UDL PRINCIPLES*

	ENGAGEMENT	REPRESENTATION	ACTION & EXPRESSION
What is it?	The **WHY** of learning	The **WHAT** of learning	The **HOW** of learning
Why is it important?	Students differ in **what interests them** and **what motivates them to learn**.	Students differ in how they **perceive and make meaning from information**.	Students differ in how they **navigate learning environments and express what they know**.
What does it look like in practice?	Students engage in authentic, hands-on learning. Learning is relevant to students' identities, personal interests, and career goals. Students collaborate, co-create, and build community with peers. Students feel safe, included, and welcome. Fun and creativity are encouraged.	Course materials are accessible for all learners. Multiple media are used to present information. Language and symbols are clarified and decoded. The curriculum and course materials represent diverse individuals and perspectives. Learning is structured to help students build knowledge.	Learning activities and assessments are accessible for all learners. Students are guided to organize information, manage time, set goals, and plan their learning. Students communicate and express themselves in different ways. Students participate in class activities and demonstrate their learning in different ways.

** Abridged and adapted from the CAST UDL Guidelines.*

SAMPLE LESSON

Let's look at a sample lesson to see how the general principles described on page 2 can be applied in a CTE classroom.

Examples abridged and adapted from the lesson "Planning and Implementing a Business Project, Part 2" from Texas Education Agency/Texas CTE: https://ctetac.us/managementlesson

Key to abbreviations:
R = Representation, **A = Action & Expression**, **E = Engagement**

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ELEMENT	WHY DOES IT WORK?	GO FURTHER WITH UDL
Learning goal Students will be able to plan and implement a business project by identifying processes, graphically displaying tasks, and determining time frames of tasks.	Allows teachers to envision multiple ways students can achieve and demonstrate learning **(A)**.	Share the learning objectives for each lesson with students to **set expectations and short-term goals (A)**. Identify the academic, Common Career Technical Core, and cluster-specific industry standards to **illustrate the lesson's relevance** to students' career goals **(E)**.
Open-ended **"icebreaker" or "bell ringer"** questions, such as: What are the pitfalls of not having a project plan? How do you determine who is responsible for tasks in a group project?	Curiosity promotes engagement and focuses attention **(E)**. Provides insight into students' prior knowledge and misconceptions to inform teaching **(R)**. Example plan representing project complexity conveys the relevance of the lesson **(E)**.	As an **alternative to oral participation**, invite students to share responses using a written "entry ticket," collaborative document, or online poll **(A)**. Facilitate the activity as a "think-pair-share" or role-playing exercise to **promote collaborative learning (E)**. Display discussion questions in a printed handout, on screen, or on the whiteboard as an **alternative format (R)** and **notetaking/memory aid (A)**.
Lesson-specific **vocabulary terms**	Supports comprehension and provides essential background knowledge **(R)**. Proactively addresses language barriers **(R)**.	Display the terms and definitions on a "word wall" or slide to **support language acquisition (R)**. Provide a handout or a worksheet activity students can complete to use as a **reference during activities or later review (A)**. Include examples of each type of chart to **illustrate using multiple media (R)**.

ELEMENT	WHY DOES IT WORK?	GO FURTHER WITH UDL
Small-group activity Students work in pairs to brainstorm and visualize tasks for a project	Supports collaborative learning **(E)**. Students choose which project to brainstorm **(E)**. Combining visualization, speaking, and writing offers multiple modes of expression **(A)**.	Sharing results with the full class **extends opportunities for collaborative learning (E)**. Explain/discuss how planning skills can be applied to schoolwork to **develop executive functioning skills (A)**, **support transfer and generalization (R)**, and **illustrate relevance (E)**.
Direct instruction Lecture on project planning	Real-world examples are authentic and relevant **(E)**. Embedded discussion questions and hands-on activities check for understanding **(R)**.	Share lectures slides in digital format so students can **preview or review the content (A)** and **customize the display of information (R)**. Integrate visuals and video clips into the presentation to **illustrate using multiple media (R)**.
Guided practice Pairs brainstorm and sequence tasks on the topic of "How to send a text message"	Low-stakes rehearsal before graded tasks minimizes "risk" **(E)**. Familiar examples support comprehension, transfer, and generalization **(R)**.	Conduct a "gallery walk" of project boards or have pairs report to the full class to **extend collaborative learning (E)**. Guide students to compare their results with those of other groups to **identify patterns (R)** and **facilitate self-assessment (A)**.
Independent practice Flowchart assignments	Students use multiple tools to express what they know **(A)**. Real-world tasks support job and career readiness **(E)**. Rubrics and written instructions clarify expectations for performance **(R)**.	Provide instruction on technology tools to **ensure all students have necessary skills (R)**. Explain how rubrics can be used to **plan coursework** and **self-assess submissions (A)**. **Involve students (E)** in rubric creation to **engage critical thinking (A)** and **reinforce essential concepts (R)**.
Closure Discussion questions	Helps students articulate the "big idea" **(R)**. Yields insight into students' comprehension **(R)**. Prepares students to transition to their next class or activity **(A)**.	Explain how this lesson will be **relevant to future lessons (E)** to **support planning and goal-setting (A)**. As an **alternative to oral participation (A)**, all students submit "exit tickets," which the teacher can review to **identify learning gaps (R)**.

TRY-IT ACTIVITY 1

Apply the framework above to one of the extension activities suggested in the lesson plan or another activity of your choice. Identify examples of UDL principle(s) and/or practices the activity addresses and propose two or three ways you could adapt the activity to go even further with UDL. Refer to the **UDL Principles** in the **Quick Reference Guide** on *page 2* for ideas.

EXTENSION ACTIVITY (CHOOSE 1)	UDL PRINCIPLES/PRACTICES ADDRESSED	WAYS TO GO FURTHER WITH UDL
Project Interview Summary assignment [see lesson]		
Guest speaker		
Create a portfolio of coursework		
Participation in a CTSO or industry business competition		
Other:		

TRY-IT ACTIVITY 2

How could you make the lesson and/or extension activity more meaningful for the students in *your* CTE Management & Entrepreneurship course by:

Tip: Refer to the table on page 6 for information on student demographics and special populations within CTE and CTE Management & Entrepreneurship in New York State.

Ensuring students see images and examples of people like themselves working in management and entrepreneurship?

Addressing specific barriers they might encounter (e.g., disabilities, access to resources, language skills)?

Making the lesson or activity more relevant to their identities, interests, local context, and/or career goals?

WHO ARE OUR STUDENTS IN CTE MANAGEMENT & ENTREPRENEURSHIP?

POPULATION	All U.S. CTE	All NYS CTE	NYS CTE BUSINESS MANAGEMENT & ADMINISTRATION
Female	46.7%	42.6%	**43.6%**
Nonbinary	*no data*	0.1%	***no data***
Students of Color	51.0%	59.0%	**59.2%**
American Indian or Alaskan Native	*0.9%*	*0.8%*	***0.6%***
Asian	*4.6%*	*12.3%*	***16.1%***
Black or African American	*13.1%*	*13.9%*	***11.6%***
Hispanic/Latino	*28.0%*	*29.4%*	***28.3%***
Native Hawaiian or Other Pacific Islander	*0.4%*	*0.3%*	***0.3%***
Two or More Races	*4.0%*	*2.3%*	***2.2%***
Individuals from Economically Disadvantaged Families	45.3%	59.7%	**56.4%**
Individuals Preparing for Nontraditional Fields	24.3%	18.0%	**18.6%**
Individuals With Disabilities (ESEA/IDEA)	10.7%	18.6%	**8.6%**
Homeless Individuals	1.4%	3.5%	**2.4%**
English Learners	5.4%	3.5%	**3.1%**
Youth in Foster Care	0.2%	0.2%	**0.1%**
Youth With Parent in Active Military	1.0%	0.3%	**0.3%**
Migrant Students	0.3%	0.02%	**0.0%**

Sources: PCRN National Enrollment Profile, 2021-22; NYSED Enrollment Data, Secondary CTE Concentrators, 2022-23

GUIDED APPLICATION
GETTING STARTED WITH UDL IN CTE

Implementing UDL doesn't require special pedagogy or training. In fact, you're probably using UDL principles in your teaching without even knowing it! Here are a few ways you can build upon the good teaching you already do.

Complete a printed worksheet by hand or populate a digital copy to share with your principal, consultant teachers, or others who can support your UDL journey. If you share the sheet, don't forget to fill in your information below!

My name:

My CTE program(s) or course(s):

STRATEGY 1: IDENTIFY OPPORTUNITIES

For ***each*** of the three UDL principles, list one or two examples of strategies you're not currently using in your teaching, but you'd like to learn about or try. Indicate any resources, information, or support you need in order to be successful.

Refer to the **UDL Principles** in the **Quick Reference Guide** on page 2 for ideas.

ENGAGEMENT	REPRESENTATION	ACTION & EXPRESSION
[Example: I want to use polls or games to introduce lessons]	*[Example: I want to learn how to enable auto-captions in Google Slides]*	*[Example: I want to create graphic organizers to help students take notes]*
Resources required:	**Resources required:**	**Resources required:**

⚠ **Remember that UDL is not a checklist! You don't need to implement every practice to have a positive impact. Start with one or two small changes. See how they work for you and your students before adding others.**

STRATEGY 2: THE PLUS ONE (+1) APPROACH

Plus one (+1) means adding one option to each resource, activity, or assignment in a lesson or course, as appropriate. Start with options that require a minimal investment of your time and effort to build your momentum.

Choose a specific lesson or learning activity from your course. List each element of the lesson or activity, then propose a +1 for each element. Identify which UDL principle your +1 reflects and briefly explain how that principle is reflected.

Photo: BT BOCES New Visions Business Academy

Tip: Refer to the examples in the row What Does It Look Like in Practice? in the table on page 2 to help you explain how your +1 represents one or more UDL principles.

For example:

- Add a short video to a traditional lecture for **multiple means of representation**.
  Bonus: *Make sure the video you select has captions or a transcript to double your impact!*
- Allow students to submit a video, podcast, infographic, or other creative product instead of a written essay, lab report, or research paper to provide **multiple means of action and expression**. Or, offer a choice of a multiple-choice quiz or an open-ended essay question to check students' comprehension.
  Bonus: *Foster critical thinking by inviting students to co-create assignment guidelines and grading criteria, propose quiz questions, and/or participate in peer assessment activities.*
- Offer **multiple means of engagement** by allowing students to choose whether to complete some learning activities individually or in teams. Or, let them choose their own topics and/or formats for assignments.
  Bonus: *Permitting a choice of formats is a UDL double-dip of boosting engagement AND providing options for action and expression!*

Lesson or activity title/topic:

WHAT YOU DO NOW	YOUR +1	WHICH UDL PRINCIPLE(S) DOES YOUR +1 REFLECT? HOW?