GUIDE TO **UNIVERSAL DESIGN FOR LEARNING** IN

HEALTHCARE & HUMAN SERVICES

Supporting the Whole Health of Individuals, Families & Communities

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: OHM BOCES

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

5 REASONS WHY UDL WORKS FOR CTE HEALTHCARE & HUMAN SERVICES

1. Health and human services combine theoretical knowledge with hands-on activities and practical applications. They offer **multiple modes of learning** and a variety of **authentic opportunities** for students to show what they know.
2. With attention to the emotional components of learning, UDL helps students develop the **empathy, communication, and interpersonal skills** required in health and human services.
3. We all want to look and feel our best! Health and wellbeing involve **real-world issues** that are **relevant to diverse students**.
4. Healthcare, personal care, and wellness are high-growth fields with steady demand. Through **self-directed learning**, UDL broadens the range of knowledge, skills, perspectives, and careers students can explore.
5. By experiencing different perspectives, ways to communicate, and ways to represent information, students gain **insights into how they might better serve future clients** with a range of backgrounds and abilities.

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 "Safety in Health Science Careers" by the New York State Education Department: https://ctetac.us/hhslesson

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

Photo: Nassau BOCES

ELEMENT	WHY DOES IT WORK?	GO FURTHER WITH UDL
Learning goal: *Students will examine safety risks and potential hazards and identify health and safety practices that will prevent injury and illness.*	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)**.
Background knowledge • Close reading of an infectious disease fact sheet. • Review the concept of chain of infection and the links in the chain.	Supports comprehension and provides essential background knowledge **(R)**. Proactively addresses language barriers **(R)**.	**Support long-term recall** by guiding the students to create vocabulary flashcards **(A)**. **Grab students' attention (E)** with a "bell-ringer" activity about E. coli reproduction. Ask students to give examples and/or name characteristics of infectious diseases to **gain insight into their prior knowledge and misconceptions** to inform teaching **(R)**. **Supplement the reading with a short video** to engage various learning styles and preferences **(E)**.
Small-group activity Students develop a visual showing the chain of infection for a disease. Each group presents its visual to the class.	Supports collaborative learning, both in pairs and among teams **(E)**. Provides students with options for action and expression **(A)**. Observing the visuals and presentations permits students to perceive information in multiple ways **(R)**.	Encourage small groups to **assign roles** (e.g., scribe, reporter, artist) so individual students can navigate potential barriers **(A)**. **Show an example** of a completed visual or provide written instructions to ensure all students understand the activity instructions **(R)**. **Provide a graphic organizer or template** to help students structure their visuals and presentations **(A)**.

ELEMENT	WHY DOES IT WORK?	GO FURTHER WITH UDL
Class discussion Identify possible strategies for breaking the chain of infection at each link in the process.	Supports collaborative learning **(E)**. Helps students identify patterns and big ideas **(R)**.	As an **alternative to oral participation**, invite students to write their responses or participate in an online poll **(A)**. Offer discussion questions in a printed handout, on screen, or on the whiteboard as an **alternative format (R)** and **memory aid (A)**. **Demonstrate (R)** the proper use of various personal protective equipment (PPE) and **guide students to practice hands-on (A)**.
Handwashing demonstration Students watch a video and a teacher demonstration of hand washing protocols, taking notes on each step.	Information is represented in multiple formats **(R)**. Pace and delivery of information can be adjusted or adapted for student needs (e.g., pause, repeat, slow down) **(R)**.	Provide closed captions, a transcript, and/or written instructions as an **accessible alternative format for spoken information (R)**. Provide an **outline or graphic organizer** to help students structure their notes **(A)**.
Handwashing practice Students work in pairs to practice the protocol and provide peer feedback before demonstrating for the teacher.	Providing peer feedback supports critical thinking and communication skills **(A)**. Receiving peer feedback before observation by the teacher boosts confidence and reduces anxiety **(E)**. Demonstration allows students to "show what you know" and minimizes potential language barriers **(A)**.	Provide a **rubric, checklist, or form** to guide, structure, and streamline peer feedback **(A)**. Model a peer feedback exchange for the class to **clarify instructions (R)** and **set expectations (A)**. Perform a mock demonstration as a "student" and **let the class practice** giving feedback before breaking into pairs **(E)**.
Closure: exit tickets Students write a summary of how to properly wash hands to eliminate microorganisms.	Helps students articulate the "big idea" **(R)**. Yields insight into students' comprehension to inform teaching **(R)**. Provides an alternative to oral participation **(A)**.	Use a digital poll, word cloud, or other **visualization tool (R)** to **collect students' responses interactively (A)** and **share them with the class confidentially (E)**. As an authentic learning activity, students **create a job aid (E)** (e.g., checklist or poster) on handwashing in a **format of their choice (A)**.

TRY-IT ACTIVITY 1

Apply the framework above to a supplemental 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
"Safe Lifting" guest speaker [see lesson plan] "Costs for PPE" research project and presentation [see lesson plan] "Maintenance Cart" design activity [see lesson plan] Hands-on practice sterilizing equipment Field trip to a medical office, hospital, salon, or spa to observe safety protocols Other:		

TRY-IT ACTIVITY 2

How could you make the lesson and/or extension activity more meaningful for the students in your CTE Healthcare and Human Services course by:

Tip: Refer to the table on page 6 for information on student demographics and special populations within CTE and CTE Healthcare and Human Services in New York State.

Ensuring students see images and examples of people like themselves working in healthcare and human services?

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 HEALTHCARE & HUMAN SERVICES?

POPULATION	All U.S. CTE	All NYS CTE	NYS CTE HEALTH SCIENCES	NYS CTE HUMAN SERVICES
Female	46.7%	42.6%	**83.2%**	**92.3%**
Nonbinary	*no data*	0.1%	***no data***	***no data***
Students of Color	51.0%	59.0%	**66.9%**	**40.6%**
American Indian or Alaskan Native	*0.9%*	*0.8%*	***0.7%***	***0.5%***
Asian	*4.6%*	*12.3%*	***7.2%***	***1.4%***
Black or African American	*13.1%*	*13.9%*	***22.6%***	***11.3%***
Hispanic/Latino	*28.0%*	*29.4%*	***34.0%***	***23.9%***
Native Hawaiian or Other Pacific Islander	*0.4%*	*0.3%*	***0.3%***	***0.1%***
Two or More Races	*4.0%*	*2.3%*	***2.2%***	***3.5%***
Individuals from Economically Disadvantaged Families	45.3%	59.7%	**65.0%**	**54.2%**
Individuals Preparing for Nontraditional Fields	24.3%	18.0%	**11.6%**	**3.7%**
Individuals With Disabilities (ESEA/IDEA)	10.7%	18.6%	**13.3%**	**20.9%**
Homeless Individuals	1.4%	3.5%	**3.3%**	**2.3%**
English Learners	5.4%	3.5%	**2.8%**	**2.0%**
Youth in Foster Care	0.2%	0.2%	**0.2%**	**0.3%**
Youth With Parent in Active Military	1.0%	0.3%	**0.3%**	**0.1%**
Migrant Students	0.3%	0.02%	**0.03%**	**0.03%**

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: OHM BOCES

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?