



Universal Design for Learning

by Elizabeth Hartmann, Ph.D.

Practice Perspectives - Highlighting Information on Deaf-Blindness

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It is essential that children who are deaf-blind have learning experiences that improve their quality of life. Unfortunately, even when educational teams work together to create individualized education programs, these students do not always have full and equal opportunities to learn. There are many possible reasons for this. School districts may have limited resources, and educators and other school personnel may lack expertise in deaf-blindness or have low expectations for students who are deaf-blind. One of the largest barriers, however, is that curricula are often inaccessible and inappropriate to how children with deaf-blindness experience the world.

Universal Design for Learning (UDL) is a new way of thinking about education, that has the potential to reform curriculum and make learning experiences more accessible and meaningful for all students. UDL is a framework, a philosophy of education, that changes how people think about education and helps them to value the diversity of all learners. It is a powerful tool that has the potential to dramatically influence how all students experience school.

This issue of *Practice Perspectives* describes the basics of UDL and how it applies to students who are deaf-blind. The information is intended to help teachers, parents, interveners, and individuals with deaf-blindness better understand UDL so that they can actively participate in the development of UDL practices to improve education for all students.



What is UDL?

UDL has three principles that encourage educators to ask, "Is this curriculum designed to maximize learning for *all* students?" Asking this simple yet highly complex question shifts the focus from viewing a student as not fitting in to recognizing that the curriculum presents barriers that interfere with learning (Rose & Meyer, 2002). It is the curriculum, not the student, that needs to be fixed.

In addition, the UDL framework shifts the focus of a curriculum from memorization and regurgitation of information to mastery of the learning process. The goal of education in the 21st century is to help students become resourceful and strategic learners and prepare them for a lifetime of learning. Anyone who develops or implements lessons or curricula can use the UDL principles to make sure their educational goals, materials, methods, and assessments meet the diverse needs of all learners.

UDL Principles

Principle 1: Provide multiple means of representation. Because students differ in how they understand information, a curriculum should provide a variety of ways to comprehend the concepts being taught—e.g., pictures, words, objects, photos, Braille, sign language, and videos.

Principle 2: Provide multiple means of action and expression. Because students differ in how they navigate a learning environment and express what they know, a curriculum should be flexible and provide varied ways for students to respond to and act upon what they are learning.

Principle 3: Provide multiple means of engagement. Because students differ in the ways they are motivated to learn, a curriculum should provide varying levels of challenge, support, and relevance that help students stay engaged in learning and support meaningful connections with others.

Frequently Asked Questions

Where did UDL come from?

The UDL framework was developed by a group of educators and researchers with the mission to use technology to improve educational outcomes for students with multiple disabilities. Through their work in schools, they found that existing curricula were often inflexible, largely text-based, and irrelevant to the lives of many students, including those without special needs. When adaptations or accommodations were made to a curriculum, it was often after the fact and failed to provide students with timely and appropriate learning experiences. The UDL framework evolved as they began to think of ways to fix curricula from the beginning to support learning for all students. They created the UDL framework using research and best practices in the fields of neuroscience, education, and technology.

What do we mean by *curriculum*?

In the UDL framework, *curriculum* refers to educational goals, methods, materials, and assessments. Goals are the expectations for the students. Methods are the instructional decisions, approaches, procedures, and routines used to encourage learning. Materials are the media used to present or represent concepts and knowledge. Assessment is the ongoing process of gathering information about a student's knowledge, skill, and engagement.



The term *curriculum* is often used to refer to a specific body of knowledge, such as an algebra or phonics curriculum. In the UDL framework, the term curriculum goes beyond referring to content that requires mastery to include mastery of the act of learning itself. The purpose of a curriculum is to support students to become lifelong learners who are skillful, knowledgeable, and purposeful in their lives.

What can UDL learn from the field of deaf-blindness?

As the UDL framework is developed and applied for all students, it will need to rely on and incorporate the collective knowledge and expertise of professionals, families, and individuals with deaf-blindness. The field of deaf-blindness intrinsically understands that everyone learns differently and that a "one-size-fits-all" curriculum doesn't support authentic learning.

Expertise based on this understanding is essential as the UDL framework is put into practice to provide accessible, responsive, motivating, and meaningful learning environments.

Why does the field of deaf-blindness need UDL?

Professionals who work with students who are deaf-blind spend time and energy ensuring that their students have access to the curriculum. But, even when students with deaf-blindness have basic access to learning, the curriculum may still fail to provide goals, concepts, or experiences that are worth learning. The constant, tiring act of retrofitting an inadequate curriculum is made unnecessary when the UDL framework is adopted because the needs of learners with deaf-blindness (and all other learners in the class) are considered **from the start**. The framework helps learners with deaf-blindness by ensuring that they have access to a curriculum that will prepare them for meaningful lives and support from educators who consider their unique needs.



UDL in Practice

Let's consider how UDL principles and guidelines can be put into practice to better educate a student with deaf-blindness. During an elementary school science lesson on the weather, a student with deaf-blindness is likely to face barriers if his or her learning needs are not taken into consideration. It may be a struggle for the student to understand the concepts being taught and connect them to personal experiences. He or she may not have ways to express his or her own unique understanding of weather, causing isolation from peers. Last, but not least, the lesson may not provide ways to keep the student interested and focused on the topic, resulting in the student becoming withdrawn.

Now, consider a UDL lesson on the weather that is designed from the start to maximize learning for the student with deaf-blindness (and all other students in the class). Instead of modifying a standard lesson designed for "typical" learners, the teacher has the flexibility to:

- ◆ use a variety of materials, media, language, and symbols to represent concepts,
- ◆ give students choices in how to respond to what they are learning, and
- ◆ provide opportunities for students who have different learning styles and support needs to stay interested in the lesson.



Representation

The teacher might offer students an option to learn about the weather by creating an experience journal to record different weather conditions. The teacher could encourage the students' use of multiple ways to represent concepts and record their experiences (e.g., pictures, words, videos, objects). For example, the student with deaf-blindness might choose to represent the wind by collecting falling leaves from the school yard. (UDL Principle #1: Multiple means of representation)

Action and expression

The teacher could encourage students to share their journals and have conversations with peers and other communication partners, such as friends and family members. The student with deaf-blindness might share a collection of leaves with another student in the class. The leaves could be used as the basis for a conversation about the wind using the student's preferred communication mode. (UDL Principle #2: Multiple means of action and expression)



Engagement

Finally, the teacher may decide to build on students' interests and existing knowledge of weather by encouraging them to combine representations of their favorite type of weather with recollections of personal experiences about favorite people and places and record them in a journal. For example, they could take pictures of a best friend enjoying the wind, record the sound of wind in their backyards or at the beach, or collect objects from different places where they've experienced weather with another person. (UDL Principle #3: Multiple means of engagement)

It is important to note that, in this example, the teacher provides all options to all students in the class, whether they are deaf-blind or not. By teaching a lesson flexibly enough to give a student with deaf-blindness relevant and meaningful learning experiences, the teacher also maximizes learning for the entire class.

Key Points:

- ◆ The purpose of a curriculum is to support students to become lifelong learners who are skillful, knowledgeable, and purposeful in their lives.
- ◆ UDL is about optimizing learning by reducing the barriers found in curricula. It is the curriculum, not the student, that needs to be fixed.
- ◆ The knowledge that professionals in the field of deaf-blindness have of diverse learning needs and their expertise in accommodating them can help inform further development and implementation of UDL.
- ◆ Anyone who develops lessons or curricula can apply UDL principles to ensure that educational goals, materials, methods, and assessments are applicable to all students, including those who are deaf-blind.

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National Consortium
on Deaf-Blindness

The Teaching Research Institute
Western Oregon University
345 North Monmouth Avenue
Monmouth, OR 97361

Voice: 800.438.9376
TTY: 800.854.7013
Fax: 503.838.8150

E-mail: info@nationaldb.org
Web: www.nationaldb.org



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For More Information

Center for Applied Special Technology (CAST). (2011). *Universal Design for Learning guidelines version 2.0*. Available at www.udlcenter.org/aboutudl/udlguidelines

Jackson, R. (2005). *Curriculum access for students with low-incidence disabilities: The promise of Universal Design for Learning*. Wakefield, MA: National Center on Accessing the General Curriculum. Available at www.cast.org/publications/ncac/ncac_lowinc.html

National Educational Association. (2009). *Universal Design for Learning (UDL): Making learning accessible and engaging for all students*. An NEA policy brief. Available at www.nea.org/assets/docs/PB_UDL.pdf

Rose, D. & Meyer, A. (2002). *Teaching every student in the digital age: Universal design for learning*. Alexandria, VA: Association for Supervision and Curriculum Development.

National Center on Universal Design for Learning
www.udlcenter.org

CAST (Center for Applied Special Technology)
www.cast.org

About the author:

Elizabeth Hartmann is an assistant professor in education at Lasell College in Newton, Massachusetts. She recently completed a postdoctoral fellowship in UDL at CAST and Boston College. She is a teacher of students with multiple disabilities, including visual impairments and deaf-blindness, and is a graduate of the Joint Doctoral Program in Special Education at San Francisco State (SFSU) and the University of California at Berkeley.

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