UNIVERSAL DESIGN FOR LEARNING IN ADULT LITERACY EDUCATION INCREASING OUTCOMES FOR ALL LEARNERS

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ABSTRACT

Two important pieces of legislation, the Americans with Disabilities Act (1990) and the Individuals with Disabilities Education Act (IDEA 2004), have had huge impacts on the way that we educate students with special needs in the United States. Combining the intent of this legislation with ideas that originated in architectural design, adult educators have the potential to change the experience of adult learners of all educational abilities. By making a paradigm shift to embracing Universal Design for Learning, adult educators can increase learning outcomes for all students.

Keywords: Universal Design for Learning (UDL), special needs, instruction, learning styles, differentiation

THE LEGISLATION

The Americans with Disabilities Act was passed in 1990 and signed into law by President George H. W. Bush. This landmark civil rights legislation is designed to prevent discrimination against people with disabilities and to ensure that they have the same access to opportunities as everyone else. This includes equal access to employment, transportation, public accommodations, communications, and access to state and local government programs and services. Much of what most people know about the Americans with Disabilities Act (ADA) is related to accessibility—the law requires that new construction be accessible and that existing construction be modified to eliminate barriers to access. This commitment in the ADA to eliminating barriers is a key concept in Universal Design for Learning.

The precursor to the Individuals with Disabilities Education Act (IDEA, 2004) was the Education for All Handicapped Children Act, otherwise known as Public Law 94-142, signed into law by President Gerald Ford. This legislation required any state that received federal funding to provide equal access to education for children with disabilities and provide them with one free meal a day. The Education for All Handicapped Children's Act became the Individuals with Disabilities Education Act under President Bill Clinton on June 4, 1990. This amendment to the law states that a disability is a natural part of the human experience and in no way diminishes the right of individuals to participate in or contribute to society. Improving educational results for children with disabilities is an essential element of our national policy of ensuring equality of opportunity, full participation, independent living, and economic self-sufficiency for individuals with disabilities.

The IDEA legislation went beyond eliminating barriers to focusing on providing equal opportunity and equal educational outcomes. By using Universal Design for Learning, adult educators can ensure more equitable outcomes for adult learners.

THE IDEA

Universal Design is an idea that is credited to Ron Mace of North Carolina State University. With traditional architectural design, nondisabled architects created structures with the nondisabled in mind, and then made accommodations and modifications to make the spaces accessible to people with disabilities. Mace was born with polio and used a wheelchair. His life experience inspired him to envision a form of design that would focus on creating the greatest degree of access for the broadest range of people. In this way, everyone could benefit from the design. In the older model, designers built spaces, buildings, and towns where anyone with mobility issues either didn't have access or would be unable to navigate the space independently. Universal Design begins with creating spaces that allow independence for the person with the least amount of access, and the rest of the world benefits as well. Examples of Universal Design include things like curb cuts, automatic doors, and sloped access to buildings. If a designer creates a town to accommodate a person navigating in a wheelchair, for example, it allows anyone in a wheelchair to navigate independently, but it also provides easier access to a mom pushing a stroller (curb cuts), a shopper whose hands are full (automatic doors), or a person using crutches or a walker (a ramp). It is this concept of broader access benefitting a broader population that gave birth to Universal Design for Learning.

The Birth of Universal Design for Learning

As in architecture, most education is designed with typically developing students in mind, and then lessons are modified reactively to accommodate students who are diverse. In 1984, David Rose and Ann Meyer founded the Center for Applied Technology and advanced a proactive approach to instructional design. Their mission was to "expand learning opportunities for all individuals, especially those with disabilities, through research and the development of innovative, technology-based educational resources and strategies." They applied the principles of Universal Design to education resulting in a Universal Design for Learning. There are three basic guidelines for Universal Design for Learning: 1) provide students with multiple means of engagement, 2) provide students with multiple means of representation, and 3) provide students with multiple means of expression.

Providing multiple means of engagement means focusing on those factors that affect a learner's motivation. Adult learning theory tells us that adults are motivated when they experience autonomy (I can make my own choices), competence (I can do this), and belonging (I am welcome here). Providing multiple means of engagement involves creating lessons that increase choice and autonomy, making certain that lessons have relevance for your student population, allowing for individual work and/or collaboration, having appropriate goals based on each student's personal needs and abilities, and allowing for students to assess their own mastery of content.

Providing multiple means of expression means attending to the various ways that different students construct knowledge. Adult learners can be incredibly diverse (visual, auditory, kinesthetic, verbal, etc.), so our instructional strategies should be as well. This involves incorporating images and audio/visual media, helping students understand vocabulary and mathematical signs and symbols, facilitating student comprehension through building

background knowledge, creating connections between content, using concrete representations of abstract concepts, and helping students organize information in ways that help them transfer learning.

Providing multiple means of expression means providing students with a variety of ways to demonstrate mastery. For some students writing is easy, for others writing is torture. Universal Design for Learning allows students opportunities to demonstrate mastery in ways that build upon their strengths and in ways where their weaknesses don't interfere with their ability to show what they have learned. This could mean providing students with options to present a poster, a video, or deliver a speech in lieu of a writing assignment or using a variety of strategies to solve a problem.

THE APPLICATION

Applying Universal Design for Learning in the Adult Literacy Classroom

A simple way to think of Universal Design for Learning in the adult literacy classroom is by thinking about who your learners are, thinking about the barriers that your learners face in their learning, and designing learning experiences that eliminate (or attenuate the impact of) those barriers.

Thinking About Who Our Learners Are

If I want to learn about my students, I might begin by looking at my assessment data, doing informal assessments of students, reviewing their SMART goals from orientation, interviewing them to see where their motivation levels are, and even getting a sense of what frustrates them as learners. I can create multiple activities for students that will allow them the chance to choose their level of engagement and their goals for an assignment. A whole group social studies lesson on the Civil War, for example, could be a multimedia lesson that helps all students develop background knowledge of the war but could easily lend itself to being a lesson on sequencing events for some students, cause and effect for another group of students, synthesis and analysis for others. I can also create different learning environments that are conducive to learners with varied social and sensory needs. Some students may enjoy working in groups and benefit from the activity level in the classroom; other students may need to work alone in a quiet corner to process effectively. Learning about students and then using that knowledge to inform instruction is the foundation of student-centered design.

Thinking About the Barriers to Learning

When I think about my students' learning barriers, I may begin by looking at a student's learning disability assessments or doing learning style inventories and talking to learners about the ways they have learned in the past and the instructional strategies that they have found unhelpful. This information could help me think of ways to incorporate image, audio stimuli, visual stimuli, manipulatives, art, or movement in a lesson. Perhaps I show a video to the class, have two outgoing and verbal students do a dramatic reading between Abraham Lincoln and Frederick Douglass or Jefferson Davis. I might have students close their eyes and listen to an audiobook or podcast on the topic of study. For some students I might need to supply a lot of vocabulary as I work to build background knowledge. I might have to provide

oral and written directions and provide models of what I expect from students rather than just providing written directions and expecting them to understand what is being asked of them. I may choose to use different fonts (sans serif), contrasting colors, and larger print. I may display some work with images for students and information with lots of white space for other students. I might make sure that videos have captions for students who have trouble hearing or who process information verbally, and that magnification is available for students with visual challenges. Each of these strategies allows me to remove the barriers of learning for my students with learning difficulties, disorders, and disabilities but can also make learning more accessible (and enjoyable) for my students who do not have disabilities.

Removing Learning Barriers

Another way to eliminate barriers is by allowing students to demonstrate mastery in a variety of ways. Where some students may have an assignment they can complete in one session, others may have a longer term project. Instead of solely relying on comprehension questions, students may demonstrate comprehension of a concept or an event through artwork, a writing assignment, a diagram, a diorama, or a debate. By focusing on creating access and opportunities for success for my students with learning challenges, I am opening the world of learning to each of my students within the same classroom and challenging myself creatively as an instructor.

How Programs Can Begin to Incorporate Universal Design for Learning

At Seeds of Literacy, our one-to-one model of instruction makes application of Universal Design for Learning a bit easier to implement because each tutor can get a sense of their student's styles, strengths, and learning pace and respond accordingly. The more professional development we provide, the more I see tutors using manipulatives, images, audio, and video to complement our textual information. These tutors become champions of the strategies and encourage other tutors to use them as well. It is a little more challenging in a whole-group setting, but it is possible to do.

Programs can work collaboratively to create a library of learning units that build upon Universal Design for Learning principles. This could mean instructors working together to think about their learners, think about the barriers to learning that they see in their students, and co-creating lessons that remove those barriers. Instructors could each select one social studies lesson, for example, and build an entire lesson alone, or one instructor can look for audio resources, scripts, images, etc. for all of the lessons in a series while another looks for different vocabulary resources, strategies, and activities.

Thinking of the ways that Universal Design in architecture opens the physical world to people who access it differently makes it easy to envision the ways that incorporating the principles of Universal Design for Learning can open the world of literacy for those students who struggle to access information from text. With a small paradigm shift and creativity, adult educators have the capacity to expand learning opportunities to all adult learners. ⌘

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