

LEARNING IDEAS

Universal Design in Pre-K and Early Elementary Classrooms



What is Universal Design?

Universal design is an approach to designing environments and products so that the greatest number of people can use them. When applied to curriculum, teachers consider the potential barriers inherent in materials and activities, and plan many avenues to learning. This way, the greatest number of children can participate in the content and activities without adaptation.

Why Consider Universal Design in Education?

Children enter classrooms with different experiences, backgrounds, interests, emotional, social, and academic strengths and needs. Planning for this diversity by intentionally creating accessible teaching processes and materials will allow more children to learn successfully.



How Can Universal Design Concepts Benefit Pre-K and Early Elementary Education?

Teachers frequently create adaptations and modifications for students. With a universal design framework, teachers deliberately plan to use a variety of methods and media when presenting content. Educators assume different levels of understanding and interaction within the lesson and plan accordingly. Children at different levels will interact with and gain meaning from the grade level content with less need for special adaptations.

Consider the following when you begin to implement universal design in pre-k and early elementary classrooms:

- 1. Plan ahead for access to the grade level standards or early childhood learning guidelines:**
 - Consider your students' range of capacities in vision, hearing, communication, movement, attention and comprehension when you design instruction.
 - Review your curriculum for hidden barriers to access; for example, a standard that reads "students will write a one page essay" could be changed to "students will compose a one page essay." Composing removes the barrier of writing and could be dictated, pointed to on a communication board, or compiled with pictures.
 - Design your instructional assessment cycle using a variety of multi-sensory materials and media.
 - Seek input from parents to provide information about their children's interest.



2. Provide physical and cognitive access to all aspects of the school day:

- Make sure all indoor and outdoor spaces are fully accessible to children.
- Assess the routines of the day (i.e., carrying a lunch tray in the cafeteria, riding the bus, going from the playground to the classroom) and minimize the obstacles to independence.
- Make certain that multiple representations of print are part of instruction (i.e., picture symbols, photos, and digital text).
- Provide multiple formats for children to demonstrate what they know and can do (i.e., eye gaze, video/audiotape, yes and no to constructed questions, and performance).

3. Utilize technology as an integral part of the everyday life in the classroom, to increase access to the activities and routine for all students:

- Options for low-tech support include a triangular pencil grip, a talking calculator, a black cutout card for reading one line at a time, and a voice-activated tape recorder.

- Higher tech options may include word processors, graphic organizer software, text-to-speech and speech-to-text software, on-screen keyboards, switches and scanning methods, and digital libraries.



It's reading time in an early elementary classroom. Pairs of students work together to read digital picture books. For some, the text has been enlarged and the words are highlighted as the software "reads" the story. For others, the vocabulary is above grade level and the students challenge each other to sound out the new words. Another student uses a touch screen to turn the pages, as her partner reads the print.

Across the room, two children stand at an easel and take turns pointing out words and sentences they remember from a big book the class read earlier for morning story. A classmate has the vocabulary pre-programmed into his communication device and is reading with them.

At a third center, several students have copies of a picture book at their reading level and are listening with headphones to the taped story read in a slow format. The tape is interspersed with questions and observations to cue them to look for certain words and pictures. They can listen at a higher or lower volume depending on their auditory preference.

Where to learn more:

Center for Applied Special Technology (CAST). (2011). Available online at <http://www.cast.org>.

Council for Exceptional Children. (2005). "Universal Design for Learning: A Guide for Teachers and Education Professionals." Pearson Prentice Hall.

Moore, S. L., (2007). "Universal Design for Learning: Presuming Competence by Design - A Tutorial for Systems, Environment, Curricular, and Materials Design in Learning Systems." National Center on Low-Incidence Disabilities, University of Northern Colorado. Retrieved from <http://www.unco.edu/cetl/UDL/>.

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