

# Parent Brief

Promoting effective parent involvement in secondary education and transition

April 2005

## Universal Design for Learning and the Transition to a More Challenging Academic Curriculum: Making it in Middle School and Beyond

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*Universal design means that environments and curricula are designed, right from the start, to be flexible and useable by students of widely varying abilities.*

The transition from elementary school to the secondary system—middle school and high school—is a traumatic time for many students and their families. Any child can have difficulty with the transition. However, students with disabilities who need accommodations or adapted curricula—even those who have had successful elementary school experiences—often have more difficulty. With an increased national focus on standards-based testing and curriculum, students with disabilities face even greater challenges ahead. A new approach to teaching and learning can help middle and secondary school teachers more effectively accommodate different learning styles. This approach, referred to as “universal design,” holds potential for easing the transition to middle school and helping all students achieve academic success in their secondary school years.

### **New Challenges for Middle School Students**

The transition to middle school is a major leap for most students. Instead of one classroom, one teacher, and individual attention, students typically find themselves in a multi-period,

multi-classroom school that feels much more impersonal. Middle schools are usually larger than elementary schools, and students must adjust to having numerous teachers each day instead of one primary classroom teacher.

In secondary school, teachers are responsible for teaching several classes each day, each with a different group of students, making it harder for them to get to know each individual. Curriculum is taught at a more rapid pace, assignments and homework are more time-consuming and difficult, and high-stakes testing puts increased pressure on students. It’s easy to understand how students can feel lost in the shuffle.

When students enter the demanding academic environments of middle school, and later high school, any lack of prerequisite skills becomes more obvious. For students with disabilities, this transition can be even more challenging. Many students receiving special education services have been included in general education classrooms in elementary school, but have not actually kept up with their peers. Though present in the same classroom as their peers, many special education



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# Challenges for Middle School Students

students are not expected to learn the same curriculum as their peers or do not receive the individualized support they need in order to learn more challenging subject matter. As a result, many children with disabilities are not entering middle school prepared for such tasks as researching and writing longer, typed papers; listening and note-taking during hour-long lectures; remembering up to 80 facts per test; or handling the responsibility of more homework every night.

The recent focus on standards-based curriculum (see side panel) and testing has created a more challenging education environment for students with disabilities. Students are asked to think and inquire more critically about information, rather than just answering a teacher's question with simple facts. Some students with disabilities may need more individualized instruction, adapted goals, or alternative assessments to meet newly established state content standards.

In general, special and general education teachers have few opportunities to collaborate with one another or learn about including students with disabilities in new standards-

based curricula (Dailey, Zantal-Weiner, & Roach, 2000). Nor have content standards or secondary-level curriculum materials of academic subjects such as biology or social studies been designed with students with disabilities in mind. Most classroom curricula rely almost exclusively on printed text and are not easily accessible to students with sensory, physical, emotional, or cognitive disabilities who need alternative ways of accessing and processing information

In addition, teacher guides developed by textbook publishers do not typically include suggestions for how to accommodate students with disabilities. Some schools and teachers provide adaptations and use assistive technologies to help students use existing materials but these adaptations can diminish the concepts and skills of the curriculum, offering a different, diminished curriculum. At the same time, standards-based assessments are now required in most states for grade promotion and graduation. All of these factors combine to make it difficult for many students with disabilities to meet

**cur-ric-u-lum**  
noun, plural

**cur-ric-u-la**  
or  
**cur-ric-u-lums**

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## **What are content standards?**

Content standards specify what children are expected to know and be able to do in academic subjects. Academic content standards should “contain coherent and rigorous content and encourage the teaching of advanced skills” (No Child Left Behind Act, 2002).

## **What's a curriculum?**

The curriculum is the plan made for guiding learning in schools and the implementation of those plans in the classroom (Allen Glatthorn, 1987).

## **What's a standards-based curriculum?**

A standards-based curriculum is one in which the plan guides the learning of the content standards.

# Universal Design for Learning

higher academic standards in middle school and eventually to graduate from high school with a standard diploma.

Since the reauthorization of the Individuals with Disabilities Education Act (IDEA) in 1997, school districts have been responsible for providing access to the general education curriculum for students with disabilities. By promoting access to the general education curriculum for students with disabilities, the law aims to improve learning, increase graduation rates, and better prepare students with disabilities for postsecondary education, employment, and a fulfilling adult life. Universal design is a strategy that can help secondary school teachers teach standards-based general education curricula to students with disabilities more efficiently and effectively.

## **Universal Design and the Transition to Middle School**

The use of universal design principles in middle school and high school settings has great potential to benefit both students and teachers. It is an approach that makes it easier for teachers to accommodate different learning styles. Alternatives are built into the curriculum instead of developed or added on by teachers after students falter. The approach allows students with a broad range of abilities to learn and succeed—without placing an extra burden on teachers to adapt or create new materials for students in each of their classes.

Universal design is a generic term describing design that is intended to “simplify life for everyone by making products, communications, and the built environment more usable by as many people as possible at little or no extra cost” (Center for Universal Design, 1997). The basic idea behind universal design is that environments

and products should be designed, right from the start, to meet the needs of all users rather than just an “average” user. In architecture, universal design has become well accepted. It is now routine to include ramps, curb cuts, and automatic doors in new construction because it is more efficient to design structures that are usable by as many people as possible from the beginning instead of adapting a building for diverse users later.

The concept has also been applied in fields other than architecture. For example, television captioning was first only available to those who purchased expensive decoder boxes. Later, decoder chips were built into all televisions, making captions universally available. Although designed for individuals with hearing impairments, captioning has proved to be popular with many users such as patrons of noisy restaurants, airports, and health clubs; English language learners; parents with reading-ready children who watch TV; and couples who have a TV set in their bedrooms yet want to go to sleep at different times.

Universal Design for Learning (UDL) is a term used by the Center for Applied Special Technology (CAST) to describe its work on curriculum design and access to curricula. Just as universal designs in architecture benefit all users, UDL benefits all students. The aim is to create curricula that are flexible enough to challenge the most gifted students, students struggling below grade level, and everyone in between. It does this by providing students with alternative ways to explore content, using multiple approaches at various levels of complexity. The goal is to meet each student at his or her current ability level, allowing him or her to advance to more challenging content at an individual pace. Because flexibility is built into the curriculum

# A Range of Options

and the environment, UDL helps each student to participate and succeed even when a teacher is less familiar with the individual needs of each student.

## **Universal Design and Students with Disabilities**

For students with disabilities, this approach has great potential. Students with disabilities, whether sensory, physical, emotional, or cognitive, may need alternative ways of accessing and processing information. UDL is a strategy schools can use to provide students with disabilities with access to more challenging course content; meet the legal requirements of IDEA; master state content standards; and develop the academic, study, and interpersonal skills needed to succeed in postsecondary education and employment.

How does it work? Universally designed instructional materials and activities present students with a range of options for learning. Alternative activities allow individuals with wide differences in their abilities—to see, hear, speak, move, read, write, understand English, pay attention, organize, engage, or remember—to achieve learning goals. Information is presented to students through multiple

means such as audio, video, text, speech, Braille, photographs, or images. Likewise, UDL allows students to use multiple means to express what they know through writing, speaking, drawing, or video recording.

Advances in technology have made some universal design strategies much easier to implement. Teachers have access to computers, software, assistive technology, and other tools that can adapt the curriculum to suit a child's learning style. For example, textbooks and other reading materials can be made available in a digital format that includes audio, captions, and audio descriptions of visual images and charts.

However, UDL is not only about including technology in the classroom. During the last 20 years researchers have identified a number of effective strategies that teachers can use to help all students in their classroom. The Institute for Academic Access, for example, provides information in its online library about strategies that teachers can use to help students of diverse abilities improve important academic skills such as understanding concepts, organizing information, and detecting and correcting errors in their written work.

## **Examples of Universal Design for Learning**

- If a student learns best through listening, he or she can use a computer to read stories and information aloud, or to pronounce new words.
- If a student learns more easily with large print, curriculum materials can easily be provided in this format.
- If a student can explain things best by using word processing software and a keyboard rather than using pencil and paper, then that will be the method of choice.
- If a student struggles to identify the most important points or organize information, he or she can use a computer program that helps students learn by doing.

The Center for Applied Special Technology (CAST)

# Technology and Teaching Strategies

Straightforward teaching strategies that can make information accessible to students with learning or cognitive disabilities include summarizing big ideas, repetition, practice, explicitly stating goals, and giving explicit instructions. Teachers can remove supports as students become more proficient. Universal design also incorporates simple physical accommodations such as making sure that every student has a clear sight line to the teacher and the blackboard; that equipment used for learning should be easily adapted for left- or right-handed use; and that materials should have clearly labeled instructions with symbols as well as words.

## The Future

While such techniques are neither esoteric nor difficult to implement, universal design is a new concept for many educators as well as parents. Parents may know about universal design before teachers at their child's school. Parents know that it is hard to watch their son or daughter struggle in school when he or she is capable of learning more challenging material if given more individualized instruction. By educating teachers and staff as well as school board members and administrators about the concept of universal design, parents can help shape the future of inclusive secondary education.

## What can parents do to help implement UDL approaches in the classrooms?

1. Ask teachers if they are familiar with the concept of universal design for learning or if they are currently using universally designed curriculum in their classroom.
2. See that related goals are incorporated into a student's IEP so that he or she can learn the same content as their peers. For instance: Discuss how members of the IEP or transition planning team can help general educators understand and implement these concepts in the classroom.
3. Advocate with local school boards and state departments of education for policies that require newly purchased textbooks and curricula to be fully accessible to students with disabilities by incorporating UDL principles.

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## Universal Design for Learning: Education Policy for the 21st Century

The U.S. Department of Education has taken an important step toward guaranteeing that students with disabilities have equal access to textbooks. It has sponsored the development of voluntary guidelines, called a national file format, for textbook publishers to convert printed materials into electronic files. Several states led the way by enacting legislation requiring that newly purchased textbooks be universally designed. Right now, however, each state has differing requirements for textbook publishers—some want electronic files in HTML and others want it in Microsoft Word. A national file format will make it easier for textbook publishers to produce, and more students to access, universally designed curriculum materials. Information on state legislation relating to accessible instructional materials can be accessed from <http://nimas.cast.org/about/resources/index.html>.





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## Sources

- Bremer, C. D., Clapper, A. T., Hitchcock, C., Hall, T., & Kachgal, M. (2002). Universal design: A strategy to support students' access to the general education curriculum. Minneapolis, MN: University of Minnesota, National Center on Secondary Education and Transition. Retrieved March 23, 2005, from <http://www.ncset.org/publications/viewdesc.asp?id=707>
- Center for Universal Design (1997). What is universal design? Retrieved October 12, 2004, from [http://www.design.ncsu.edu/cud/univ\\_design/ud.htm](http://www.design.ncsu.edu/cud/univ_design/ud.htm)
- Council for Exceptional Children (1998). A curriculum every student can use: Design principles for student access. Educational Resources Information Center/Office of Special Education Programs Topical Brief. Reston, VA: Author. (ERIC Document Reproduction Service No. ED423654). Retrieved March 23, 2005, from <http://www.cec.sped.org/osep/udesign.html>
- Dailey, D., Zantal-Wiener, K., & Roach, V. (2000). Reforming high school learning: The effect of the standards movement on secondary students with disabilities. Alexandria, VA: Center for Policy Research on the Impact of General and Special Education Reform. Retrieved on April 15, 2003, from [http://www.nasbe.org/Educational\\_Issues/Reports/reforming\\_hs\\_learning.pdf](http://www.nasbe.org/Educational_Issues/Reports/reforming_hs_learning.pdf)
- Glatthorn, A. (1987). Curriculum renewal. Alexandria, VA: Association for Supervision and Curriculum Development.
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, § 115 Stat. 1425 (2002).

## Resources on UDL:

- The Center for Applied Special Technology (CAST): [www.cast.org](http://www.cast.org)
- PACER's Simon Technology Center: [www.pacer.org](http://www.pacer.org)
- The National Center on Secondary Education and Transition: [www.ncset.org](http://www.ncset.org) and <http://www.ncset.org/topics/udl/?topic=18>
- The Institute for Academic Access: [www.academicaccess.org](http://www.academicaccess.org)
- The University of Kansas Center for Research and Learning: [www.ku-crl.org](http://www.ku-crl.org)
- National Center on Accessible Information Technology in Education [www.washington.edu/accessit](http://www.washington.edu/accessit)
- The National Instructional Materials Accessibility Standard at CAST: <http://nimas.cast.org>



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Creating Opportunities for Youth With  
Disabilities to Achieve Successful Futures



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