**CHALLENGING ACADEMICS FOR STUDENTS
WITH DOWN SYNDROME**
Strategies that Work in the General Education or Special Education Classroom

The Individuals with Disabilities Education Act (IDEA) states that all students with disabilities must have access to and make progress in the general education curriculum. The No Child Left Behind Act (NCLB) states that all students must be educated in accordance with grade-level state content standards. If your child takes an alternate assessment, it <u>must</u> be based on standards that are aligned to grade-level content, although it can have less complexity and include prerequisite skills. Middle and high school students should not be using elementary school standards and curriculum. This is true whether the students are being educated in general education or special education classrooms. Unfortunately, many students with Down syndrome and other intellectual disabilities are not receiving the level of instruction required by these statutes, especially in the upper grades. Instead, schools generally have low academic expectations for students with intellectual disabilities and concentrate on "functional life skills."

Many schools are missing the point that functional life skills, including job training, can be acquired without compromising academic instruction. We all know that some of the most important lessons we learned in school were functional life skills, and we learned them as part of an academic curriculum. Most skills that are essential for independent living and successful employment are natural byproducts of the general education curriculum. Higher reading and math skills, more sophisticated computer skills, improved problem solving strategies (including asking for help from the appropriate person), greater interpersonal and communication skills, increased comfort with public speaking, more independence, even the ability to cook and sew, are skills that can be gained from the general education curriculum. In addition, in middle and high school, there are in-school or after-school opportunities for job training that do not require students to miss their academic classes. For example, students can work on money skills in the school store; they can manage a sports team or they can perform clerical tasks in the office.
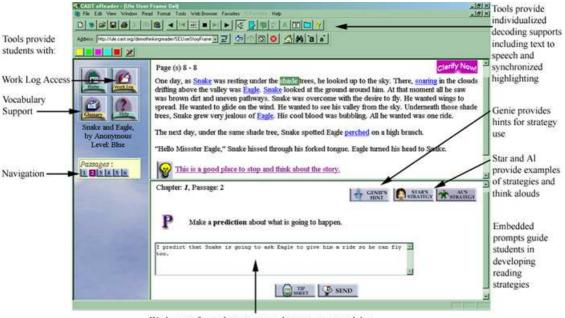
It is critically important to keep expectations high. You will need to help your child's teachers understand his or her long-term goals and how an academic education will support those goals. Most teachers are not aware that there are over one hundred college

programs around the country for students with intellectual disabilities (see **www.thinkcollege.net**), including a two and four year program that NDSS is helping to develop in New Jersey at Mercer County Community College and The College of New Jersey. These programs will serve as replicable models for other states. As your child gets older, he or she can become a self-advocate for high expectations. If your child's communication difficulties get in the way of self-advocacy, he or she can develop a PowerPoint (with support, as needed) to help the teachers learn about his or her strengths, needs, interests and goals for the future. The PowerPoint will have the added benefit of showing that your child is capable of using technology, a skill that always raises expectations.

Thanks to NCLB, schools are starting to recognize that students with disabilities have the ability and the need for challenging academic instruction. However, most general educators and many special educators still do not know how to properly modify the curriculum, the instruction, the materials and the assessments for students with intellectual disabilities. NDSS is working to promote the principles of Universal Design for Learning (UDL) at the federal and State levels so schools can be provided with curriculum, materials and assessments that are already designed to be accessible by the widest range of students. We are also calling attention to the need for special and general educators to be trained to use teaching methods that provide access to the curriculum for all students. UDL comes from the principle of universal design in architecture. Buildings should be designed from the start to be accessible to everyone instead of trying to fix an accessibility problem when someone with a disability is unable to enter. UDL helps educators customize their teaching for individual differences so students can be offered:

- **Multiple means of representation** to give learners various ways of acquiring information and knowledge
- **Multiple means of expression** to provide learners alternatives for demonstrating what they know, and
- **Multiple means of engagement** to tap into learners' interests, challenge them appropriately, and motivate them to learn.

The Center for Applied Special Technology (CAST at www.cast.org), the organization that first articulated the UDL principles, has published many articles and developed digital instructional materials that can be used in the application of UDL. These materials have multiple built-in levels of supports to help the students read and understand the material. For example, some students can have the entire text read by the computer program, others can just click on certain difficult words to hear them. Students are also guided at multiple levels through comprehension tasks such as questioning, predicting, and summarizing. See the graphic below from one of CAST's products.

Tools provide
students with:

Work Log Access

Vocabulary
Support

Navigation

Tools provide individualized decoding supports including text to speech and synchronized highlighting

Genie provides hints for strategy use

Star and Al provide examples of strategies and think alouds

Embedded prompts guide students in developing reading strategies

Work space for student responses that are sent to work log

There are also other organizations that have developed technology and software that would improve access to the general education curriculum for students with disabilities. While you are waiting for the benefits of all these innovations to come to your school, you can use the UDL principles as a guide to helping educators understand how they can provide your child with a challenging academic education:

Curriculum Objectives/Benchmarks
- Provide a clear sense of your expectations. Each core subject area comes with a long list of objectives for every grade-level. If your child is able to master all of these objectives, you need to communicate this expectation to the teachers and the IEP team. However, if you do not expect your child to master all of the objectives, you need to explain that there is a core subset of objectives for each unit that will be appropriately challenging for your child and that you expect mastery on those objectives and exposure to the rest.
- Ask the educators to look at each grade-level unit and pick out some core (and very concrete) instructional objectives that your child will be expected to learn. It is better to err on the side of providing too much challenge than too little. These instructional objectives go beyond IEP goals, which support grade-level instructional objectives but do not reiterate all of them (e.g. many IEPs do not reflect social studies or science instructional objectives, nor do they reflect every math and reading objective that the child will work on in class). To the extent there are academic goals on the IEP, they should be based on the content standards for that subject area.

> Example: The reading content standard for second grade may contain the following objective: use phonics to decode words. This could also be a short-term objective under your child's reading goal on the IEP, although you might specify the number of words that he or she is expected to be able to decode over the course of the year.

- The selected instructional objectives should be the ones that are essential for the student to learn in order to actively participate in the current and future classes on this subject, to become a citizen in the community, to understand his or her body and the world we live in and to enhance post-school options (e.g. college programs, employment, independent living). These objectives should contain essential vocabulary that the student should learn as soon as possible in order to understand the unit.

  > Example: In 7th grade science class during a unit on the ear, the typical student may have to identify the numerous parts that make up the ear and explain all their functions. Depending on what is appropriate for your child he or she might concentrate on most of the key parts and their functions, just a few parts and their functions or concentrate on the fact that the ear is for hearing.

- Ensure that the objectives allow for multiple means of representation, expression and engagement, as defined above.

  > Example: A second grade social studies objective that requires the student to draw a picture showing important American symbols and share it with the class is not universally designed. Your child may not be able to draw recognizable pictures of these symbols. A universally designed objective would simply require students to demonstrate their understanding about the topic without prescribing a single way to do this. Your child can meet this objective by cutting out pictures from a magazine or print images from the internet that depict the flag, the Statute of Liberty and any other symbols he or she wants to share with the class.

Instructional Materials

- Final IDEA regulation Section 300.172 (b)(3) makes it clear that materials in accessible formats must be made available to any student with a disability who needs them. If you feel your child needs to have textbooks and other instructional materials in an accessible format (digital, audio etc), add this accommodation to the IEP.
- Many districts and schools have the capacity to scan materials to create digital versions for the computer. Digital text can be customized with larger font and colored background for contrast, portions can be copied into another document to create a simplified summary of the information, it can be used with a read-aloud feature to help with decoding, comprehension questions can be added—there are limitless possibilities.
- Check out http://www.cast.org/products/index.html for some products based on CAST's work (see earlier description and graphic). In addition, the special education technology department of your school district and/or your library may be able to provide a list of other products and websites.

- The services of the department that assesses the technology and software needs of students with disabilities and any technology or software that you already know is important for your child should be written into the IEP. In addition, if your child has a paraeducator, his or her hours should include time for collaboration and planning with the teachers, as well as time to locate appropriate materials or adapt the materials. If your child does not have a paraeducator, the IEP should clearly indicate who will be responsible for these tasks. Less of this time will be necessary as universally designed materials become available.

Teaching methods
- Teachers should use as many different types of media as possible to support many different learning styles.
  > Example: The lesson could include a short video clip and other visuals. In addition, information from websites on the topic could be projected on a screen and books on the topic (that are appropriate for students at different reading levels) can be in the classroom as resource materials.
- Include an accommodation on the IEP that permits your child to preview the materials before they are presented in class.
  > Examples: If the class is going to be filling in a map of the continents, you can work on this at home before it is done in school so your child can participate more fully in the classroom. Another example is to complete the summer reading assignment by selecting the first book that will be read in your child's English class in the fall.
- Homework, projects, tests and the questions that the student is asked by the teacher as part of the class discussion should be based on the instructional objectives that have been identified for the student and the IEP goals.
  > Example: Let's say your child's instructional objectives for a unit on the Civil War are to demonstrate knowledge about when the war was fought, who was President, one reason for the war and who won. In addition, your child has the IEP goal of adding /subtracting four digit numbers on the calculator. If there is a class discussion on the Battle of Gettysburg, the teacher could ask your child a question about when the war started (which is one of the child's instructional objectives) and the teacher can tell him or her the year of the battle. Then your child can use a calculator to determine how many years passed between the two dates and the teacher can ask the child for that answer.
- Help the teachers understand that it is not difficult to work IEP objectives into the grade-level classroom activities, even if the IEP objectives are far below grade-level.
  > Example: A group of students is playing a math game based on prime numbers. Your child's adapted assignment is to keep score using a calculator (IEP objective—use a calculator to add a column of single and double digit numbers).
- The teacher should find a meaningful role for your child in classroom projects that are done in cooperative groups or involve class presentations. This is part of being a full participant in the class. Even if most of the project does not focus on

your child's individualized instructional objectives, he or she will be addressing a number of IEP goals including communication, and social skills. If the class is broken into groups of three and the project requires a media specialist (to find books and materials to use) a recorder (to write down the groups ideas and information collected), and a presenter (someone who will present the groups conclusions to the class), your child should have one of these roles, rather than be given some task like holding up the poster for the presenter.

> <u>Examples</u>: Your child might be the media specialist for the group. He or she could go to the media center and ask for help to find the right materials. If your child would not be able to express this request orally, he or she could bring a request written by the group. The school's media specialist would then show your child how to find materials on a particular topic. This role offers a way to work on IEP goals about communication and independence and how to use resources like the library. Your child could also take the role of the presenter. If he or she can't read the recorder's notes, then they can be typed (by your child or with support) into a read aloud program. If your child has a keyboarding IEP goal, the typing would be a good idea even if h or she can read the handwritten notes.

Assessments

- Assessments should be easily modified to separate out the questions that relate to your child's instructional objectives.
  > <u>Example:</u> The class will be taking a test on the parts and functions of the ear. There will be 20 questions on the test. The teacher shouldn't just randomly shorten the test for your child. Instead, questions should be selected for your child based on the parts of the ear and their functions that have been identified in his or her instructional objectives.
- Your child's assessments should be designed so that they allow all the students to demonstrate their knowledge without the test itself becoming a barrier.
  > <u>Example:</u> If your child has trouble reading, the test should be read to him or her by a person or with a read aloud program on the computer.
- The questions (and answers in multiple choice, fill-in-the blank or matching column tests) should be written in easy to understand language. Often difficult words that are not related to the subject matter prevent children from answering a question that they would have been able to answer if it had been asked using simpler language.
  > <u>Example:</u> Difficult-Which part of the ear collects and channels sound to the middle ear? Simpler-Which part of the ear brings sound to the middle ear? The simpler version still tests the same concept but won't confuse a child who doesn't know the meaning of "collects and channels."
- The questions should be in a format that allows all the children to demonstrate their knowledge. Many students with Down syndrome have difficulty answering open-ended questions, which can be converted into multiple-choice, matching column or fill-in-the-blank questions. If needed, word banks that list potential answers can be used to cue the students and also help with spelling difficulties.

> Example: If your child needs cues to come up with the answer "outer ear" to the question above, it can be formatted as a multiple choice question and he or she would pick "outer ear" out of a list that contains two or three other ear parts. Often a child can recognize the right answer in a list but cannot remember of express the term without that cue.

The universal design of curriculum objectives, instructional materials, teaching methods and assessments has tremendous potential to improve the education of all children, but it is especially important for students with disabilities. It provides a framework that helps parents and educators understand how students with intellectual disabilities like Down syndrome can participate in the grade level curriculum. Imagine how much easier it would be for teachers, parents and students if your State or school district were to universally design the curriculum, demonstrate a preference for textbooks and materials that are available in accessible formats (with built-in supports), train their teachers to use universally designed teaching methods and provide universally designed assessments to accompany the curriculum. Turning this vision into a reality is one of the goals in the legislative agenda developed by the NDSS National Governmental Affairs Committee. You can help us by sharing your experiences and the need for these changes with your local and State school boards, your State Department of Education and your elected officials.