

# Universal Design for Learning (UDL)

Universal design as used in IDEA is based on the definition found in the Assistive Technology Act of 1998. [Section 3(17)]

"The term 'universal design' means a concept or philosophy for designing and delivering products and services that are usable by people with the widest possible range of functional capabilities, which include products and services that are directly accessible (without requiring assistive technologies) and products and services that are interoperable with assistive technologies."

UDL definition from <http://www.cast.org/index.html>

"Universal Design for Learning (UDL) is a framework for designing curricula that enable all individuals to gain knowledge, skills, and enthusiasm for learning. UDL provides rich supports for learning and reduces barriers to the curriculum while maintaining high achievement standards for all."

## Flexibility in Representation

- options for perception
- options for language and symbols
- options for comprehension

## Flexibility in Expression

- options for physical action
- options for expressive skills/fluity
- options for executive functions (planning/monitoring)

## Flexibility in Engagement

- options for recruiting interest
- options for sustaining effort/persistence
- options for self-regulation

Adapted from the Universal Design for Learning Guidelines v1.0. Download the complete UDL Guidelines Graphic Organizer at [http://www.cast.org/publications/UDLguidelines/UDL\\_Guidelines\\_v1.0-Organizer.pdf](http://www.cast.org/publications/UDLguidelines/UDL_Guidelines_v1.0-Organizer.pdf)

**Universal Design for Learning** provides an excellent framework for curriculum design and technology infusion. Use the following resources to learn more about UDL and how you and your school can use UDL as a guide for technology integration in the classroom.



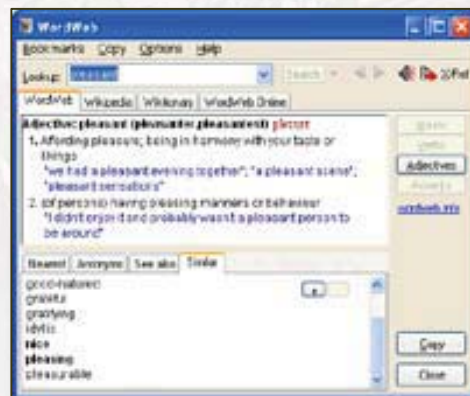
1. National Center on Universal Design for Learning - <http://www.udlcenter.org/> . new UDL center at CAST
2. UDL Guidelines - <http://www.cast.org/publications/UDLguidelines/version1.html> . guidelines to help in designing flexible curricula.
3. CAST UDL Learning Tools - <http://www.cast.org/learningtools/index.html> . extensive online collection of tools, such as the CAST Science Writer, to support learning

4. Computer Based Study Strategies - <http://cate.uoregon.edu> . excellent resource on strategies that benefit all students
5. UDL Toolkit - <http://udltechtoolkit.wikispaces.com/> . great resources to support Universal Design for Learning in your classroom
6. AT and UDL - <http://teachingeverystudent.blogspot.com> . great collection of information and ideas on teaching every student
7. HIAT - <http://www.montgomeryschoolsmd.org/departments/hiat/websites/> . collection of web resources that can help with creating a universal design for learning environment

As you read through this booklet you will find a wealth of great ideas and tools to help implement UDL in your classroom. Here are just a few examples.

### Flexibility in Representation Examples & Tools

1. BrainPop - <http://www.brainpop.com/> . animated curriculum-based resources and activities
2. KartOO - <http://www.kartoo.com/> . a visual meta search engine
3. Natural Reader – <http://www.naturalreaders.com> . a free Win text-to-speech utility. add to Adobe Reader and your computer can read PDF files aloud . use with a web browser and the Internet "talks"
4. Glogster EDU - <http://edu.glogster.com/> . online tool for creating multimedia posters with text, photos, videos, graphics, sounds, drawings, and more
5. Visuwords - <http://www.visuwords.com/> . online graphical dictionary that presents words and meanings in a color coded web of information
6. Wordle - <http://www.wordle.net/> . online app for creating "word clouds" from text you paste in or text from a URL that has an RSS feed. you can tweak your clouds with different fonts, layouts, and color schemes
7. WordWeb - <http://wordweb.info/free/> . a free English thesaurus and dictionary that works with most Win programs
8. Rationale (Win) - <http://www.austhink.com> . guided reasoning and argument/debate diagramming software for Windows. requires .net2 which may be on current XP machines
9. Interactive Romeo & Juliet - <http://www.canadianshakespeares.ca/folio/folio.html> . includes multimedia supports as well as a variety of resources and lexicons to help understand the content
10. WatchKnow - <http://www.watchknow.org/> . online videos for kids to learn from
11. Zac Browser - <http://www.zacbrowser.com/> . internet browser specifically designed for children on the autism spectrum





### Flexibility in Expression Examples & Tools

1. Voicethread - <http://voicethread.com/#home> . online tools which enable students to work together on projects using text, voice, pictures, and multimedia.
2. Flip - [http://www.theflip.com/index\\_flip.shtml](http://www.theflip.com/index_flip.shtml) . an inexpensive video camera that is user friendly. it includes built-in software to email videos or publish them online
3. Jing Project (Win . Mac) - <http://www.jingproject.com/> . free screen capture and screen recorder software
4. CamStudio (Win) - <http://camstudio.org/> . free open source screen recording software to record any computer screen activity to an avi file
5. Screenium (Mac) - <http://www.synium.de/products/screenium/index.html> . inexpensive screen and audio recorder for making quality training videos
6. Camtasia (Win) - <http://www.techsmith.com/> . excellent set of screen recording to video tools with extensive choices for final video format
7. Assignment Calculator - <http://www.lib.umn.edu/help/calculator/> . create a time management guide for writing papers
8. Visual Aids for Learning - <http://www.visualaidforlearning.com/preschool-pack-learning.htm> . visual supports to help students stay on task and focus on learning activities

### Flexibility in Engagement Examples & Tools

1. My Hero - <http://www.myhero.com/go/home.asp> . support reading and writing by allowing students to choose their heroes and to contribute information
2. Free Rice - <http://www.freerice.com/> . provides a reason to engage in the activities by donating 10 grains of rice for every correct answer



3. Windows to the Universe - <http://www.windows.ucar.edu/> . content lessons on our planet, solar system, and the universe. each lesson is available in 3 different reading levels and in English or Spanish
4. PowerUp - <http://www.powerupthegame.org/> . free 3D game you can download. students save Planet Helios from ecological devastation. all text chat is pre-set phrase based to prevent any inappropriate communication
5. Kid Tools Support System - <http://kidtools.missouri.edu/> . free performance support software for students (ages 7-13) that assists with self-management, problem solving, making plans, and organizing
6. Aspire (Mac) - <http://www.unifiq.com/aspire/> . broad goal oriented brainstorming and plan review software . includes some interesting tools for visually sorting information by importance
7. BrainCogs (Win . Mac) - [http://www.fablevision.com/braincogs/cog\\_product.html](http://www.fablevision.com/braincogs/cog_product.html) . learning and test taking strategies software for grades 4-8
8. Student Schedule Maker Software - <http://student2.software.informer.com/download-student-schedule-maker/> . large collection of software to help organize and track time and activities
9. Printable Schedule Forms - [http://www.kristensguide.com/Printables/student\\_schedule.asp](http://www.kristensguide.com/Printables/student_schedule.asp) . free student schedule, planner, and assignment forms
10. Using Student Essays to Build Coping Skills - [http://www.educationworld.com/a\\_lesson/lesson/lesson030.shtml](http://www.educationworld.com/a_lesson/lesson/lesson030.shtml) . ideas on helping students build coping skills
11. Wings of EPOH - <http://www.fablevision.com/wingsofepoh/> . story of a young boy with autism who takes a journey with a butterfly named Epoh ("hope" spelled backward) that teaches acceptance, tolerance and empathy. be sure to watch the video at the bottom of the webpage
12. North Star Mini Posters - <http://www.fablevision.com/northstar/miniposters/index.html> . free mini posters to download and use in the classroom, "aimed at encouraging life-long learning, diversity appreciation, creative thinking, positive school communities, and more!"
13. White Noise - <http://www.tmssoft.com/iphone-whitenoise.html> . iPhone app that provides ambient sounds to mask distractions
14. SoundCurtain - <http://itunes.apple.com/us/app/soundcurtain/id306966526?mt=8#> . iPhone and iPod Touch app that creates ambient noise to mask distractions

