



National Down Syndrome Congress Policy Brief

Universal Design for Learning (UDL)

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Executive Summary

Universal Design for Learning (UDL) is a framework developed with a set of principles and guidelines to improve and optimize teaching and learning for all people.

Multiple means of engagement (creating interest), multiple means of representation (how the content is presented) and multiple means of action and expression (how students demonstrate knowledge) are the three UDL principles.

With UDL curriculum, barriers are reduced; learning is supported; students gain knowledge, skills, and enthusiasm for learning; and their learning is validly assessed.

Universally designed instructional materials are designed from the start to be used by a wide range of learners, thereby minimizing the need for time-consuming adaptations and modifications.

Several States are working to support UDL implementation while postsecondary institutions are embracing UDL with increasing frequency.

UDL is found in many public policies in the U.S. around K-12 education, higher education, educational technology, and workforce development.

Using Artificial Intelligence (AI) to improve the implementation of UDL and using UDL to improve AI developed materials is something that is currently being explored in education and the workforce.

This brief provides advocacy tips for IEPs and policy decisions at the local and state levels.

This brief also provides resources about UDL in postsecondary education and the workforce.

Background

What is Universal Design and Universal Design for Learning?

The term “universal design” refers to the movement within architecture and product development to create places or things that are accessible to as many people as possible, including those with disabilities.

Universal Design for Learning (UDL) is a framework developed with a set of principles and guidelines to improve and optimize teaching and learning for all people based on scientific insights into how humans learn. The UDL framework guides the design of learning environments that are accessible, inclusive, and challenging for every learner. Using UDL in the classroom makes curriculum and instruction accessible and engaging for all learners. Curriculum barriers are reduced; learning is supported; students gain knowledge, skills, and enthusiasm for learning; and their learning is validly assessed. The UDL Framework was Developed by CAST in the 1990’s and has been updated most recently with the UDL Guidelines 3.0. You can find many helpful resources about UDL on the CAST website at <https://www.cast.org/>.

What are the benefits of UDL in education?

Students come to the classroom with a variety of needs, skills, talents, interests, and learning styles. For many learners, the typical curriculum has many barriers and roadblocks, while supports are relatively few.

UDL supports curriculum design that is responsive to today’s diverse classrooms. UDL improves educational outcomes for ALL students by ensuring meaningful access to the curriculum and accurate skill and knowledge assessment. As a result, UDL facilitates educating students with disabilities in the general education classroom.

CAST developed a document on the benefits of UDL and the research behind these benefits, which you can read at <https://www.cast.org/wp-content/uploads/2025/04/UDL-Benefits-Evidence-A11y.pdf>.



When environments are intentionally designed to reduce barriers, every learner can engage in challenging, meaningful learning.



What are the principles of UDL?

- Provide multiple and flexible means of engagement (the “why” of learning) to tap into students’ interests, challenge them appropriately, and motivate them to learn.
- Provide multiple and flexible methods of representation (the “what” of learning) to give students various ways of acquiring information and knowledge.
- Provide multiple and flexible means of action and expression (the “how” of learning”) to provide students with alternatives for demonstrating what they have learned

Using these three principles, UDL embeds flexibility into the components of the curriculum: goals, teaching methods, instructional materials, and assessments.

What are the UDL guidelines?

Each of these 3 principles also has guidelines for implementation, and each of these guidelines have corresponding considerations that provide more detailed suggestions. <https://udlguidelines.cast.org/> On July 30, 2024, CAST released UDL Guidelines 3.0 There are three groupings of guidelines:

- Access guidelines suggest ways to increase access to the learning goal by designing options for: welcoming interests and identities, perception, and interaction.
- Support guidelines suggest ways to support the learning process by designing options for: effort and persistence, language and symbols, and expression and communication.
- Executive function guidelines suggest ways to support learners’ executive functioning by designing options for: emotional capacity, building knowledge, and strategy development.

Is UDL just for students with disabilities?

UDL was first developed in regard to making instruction accessible for students with disabilities, but it is a format that gives ALL students the opportunity to learn. For



example, video captioning is of great help to students with hearing impairments—and is also beneficial to students who are learning English, students who are struggling readers, students with attention issues, and even students working in a noisy classroom. This is an important point to share when advocating for UDL. The more students the framework helps, the more it is likely to be used.

Both the Individuals with Disabilities Education Act (IDEA) and the Every Student Succeeds Act (ESSA) recognize that all learners must make progress in the general education curriculum. Student performance increases when students can acquire knowledge and demonstrate progress, which is what happens when UDL is fully implemented.

In what ways does UDL provide access to grade level curriculum?

Eliminating physical barriers to educational sites or materials (e.g., providing digital textbooks) is an essential step in creating accessible learning opportunities. However, genuine learning requires much more than physical access—it requires cognitive (or intellectual) access, too.

For example, providing digital text with built-in comprehension supports is one way to apply the principle of multiple means of presentation to instructional materials. A student who has difficulty accessing printed text due to visual impairment, physical disability, dyslexia or other reading disability could

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use the text reader feature (physical access), while a student who struggles with comprehension could use comprehension supports that are designed for a variety of ability levels (cognitive access). These supports could include vocabulary definitions, highlighted literary concepts, foreign language translations, or animated coaches that assist with answering comprehension questions.

UDL does not require the use of a computer and digital materials, although they provide the greatest flexibility. There are also many low-tech or no-tech options. UDL materials should also be available for home use to support homework and project tasks.

An important step when lessons and assignments are developed is to determine the core focus. If the point of a lesson is for students to demonstrate knowledge about the plot of a book, then it doesn't matter how that knowledge is demonstrated. If students are asked to list plot points in order, but writing is a barrier for some students, then requiring a written list will not be an accurate measure of how much knowledge about the plot these students have acquired. One example of an alternate demonstration of knowledge would be for the student to make a video with an oral list. Another option would be for the student to use index cards with the plot points already written on them and place them in the correct order.

How does UDL help with modifying and adapting materials?

Universally designed instructional materials are designed from the start to be used by a wide range of learners, thereby minimizing the need for time-consuming adaptations and modifications. The materials should still be further individualized, if needed, but a lot of the work will have already been done.

What is being done to promote the implementation of UDL?

Several States are working to support UDL implementation while postsecondary institutions are embracing UDL with increasing frequency.

UDL is found in many public policies in the U.S. around K-12 education, higher education, educational technology, and workforce development, including those listed below. You can find details about the UDL provisions at <https://www.cast.org/resources/udl-in-public-policy/#:~:text=In%20SEC.,schools%E2%80%9D>.

- 2024 National Educational Technology Plan
- The Strengthening Career and Technical Education for the 21st Century Act (2018)
- The Every Student Succeeds Act (2016)
- The Higher Education Opportunity Act (2008)

In addition, there has been increased dissemination of information about UDL by the U.S. Department of Education through its technical assistance centers. For example, see these UDL modules on the TIES Center website <https://tiescenter.org/resource/design-for-each-and-every-learner-universal-design-for-learning-modules>

Due to the advocacy efforts of students with Down syndrome and their families, Maryland passed a law in 2010, creating a State UDL Task Force. The work of the Task Force resulted in this report with recommendations:

<https://marylandpublicschools.org/about/Documents/OCP/SpecialReports/ARouteForEveryLearnerReport032511.pdf> After the report was released, the Maryland Board of Education adopted regulations for UDL implementation across the State.

<https://www.law.cornell.edu/regulations/maryland/title-13A/subtitle-03/chapter-13A.03.06>

Another State example is California which has a statewide UDL Coalition, "a collaborative of regional and district systems to implement Universal Design for Learning" <https://ocde.us/MTSS/Pages/CA-UDL-Coalition.aspx>

A school district leader in UDL is Montgomery County, Maryland. You can find school district level resources at <https://www.montgomeryschoolsmd.org/departments/hiat-tech/udl/> including a UDL Tool finder to address common learning barriers <https://www.montgomeryschoolsmd.org/departments/hiat-tech/udl/udl-tool-finder/>

Another district example is Bartholemew Consolidated School Corporation in Indiana. Its webpage on UDL contains many resources. <https://www.bcscschools.org/district-information/universal-design-for-learning>

Other Important Uses of UDL

Using UDL to improve the implementation of Artificial Intelligence (AI) in education and the workforce is something that is currently being explored. More information can be found at <https://www.cast.org/what-we-do/artificial-intelligence/>. It is also important that any curricula or classroom goals, teaching methods, instructional materials, and assessments that are developed with AI also use the UDL framework to ensure they work for the widest range of learners.

The UDL framework is important for career and technical education in secondary school and postsecondary programs. See this link for resources <https://transitionta.org/classroom-supports-cte3/>

With over 350 inclusive college programs for students with intellectual disabilities listed on the Think College database (<https://thinkcollege.net/college-search>) there is an increasing need for the use of UDL on college campuses and attention being given to designing college curriculum and instruction using UDL principles that benefit these students and others. You can find out more information about UDL and higher education <https://udloncampus.cast.org/>

UDL also has an important role in workplace learning and training experiences. UDL in the workplace should offer flexibility in how, when, and where work is performed, and learning and training experiences should be designed with all workers in mind. Read more about UDL and the workforce in this article <https://www.ahead.ie/journal/how-a-universal-design-mindset-can-support-learning-in-the-workplace>.

How can UDL be incorporated into my child's IEP?

While UDL is a framework for curriculum design, its principles can directly support the development and implementation of IEP goals and accommodations. It is also very important that UDL be used in whole classroom practices, so the student is part of every classroom lesson and activity.

An IEP goal that focuses on improving reading comprehension could be addressed through UDL principles by offering materials in multiple formats (e.g., text-to-speech, graphic organizers) and providing opportunities for students to demonstrate their understanding in various ways. For example, instead



of only focusing on traditional written essays, a UDL-informed IEP might include:

- Multiple means of engagement: Offering choices in project topics or themes to match the student's interests and providing opportunities for collaboration or independent work depending on their preferences.
- Multiple means of representation: Providing different ways to access and process information related to the writing task, such as graphic organizers, visual examples, or digital text with embedded supports. See if a student is eligible for free digital texts through Bookshare <https://www.bookshare.org/>
- Multiple means of action and expression: Allowing the student to demonstrate their understanding through various formats, such as a presentation, a video, or a creative project, in addition to writing.

UDL empowers students to make choices about their learning and become more self-aware of their strengths and challenges. This can be achieved by offering students choices in how they engage with material, how they demonstrate their knowledge, and how they self-regulate their learning. This also ties in with self-advocacy goals.

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What can I do to help promote UDL?

- Share this brief with others. Also, there is a comprehensive brief on advocating for UDL with specific instructional examples from the National Center for Learning Disabilities at www.advocacyinstitute.org/resources/ParentUDLGuide.pdf
- Find out if the curriculum in your school district has been developed in accordance with UDL principles by asking your child's educators and the administrators involved in curriculum development.
- Contact your district, state and national policymakers and ask them to support UDL.

State Level

- Create a State coalition of stakeholders to promote UDL (representatives from groups for other disabilities, general and special educators, principals, assistive technology personnel, related service providers, school boards, colleges and universities, etc.)
- Hold a Statewide conference on UDL.
- Encourage the State to develop a strategic plan for implementing UDL that will become part of the larger educational strategic plan. This plan should be developed in consultation with experts in the field and stakeholders, including parents.
- Encourage the State to review content standards to ensure that they are written in a way that makes the content accessible on some level to all students.
- Encourage the development of universally designed statewide assessments.
- If the State is involved in purchasing instructional materials, encourage selection policies that favor the purchase of materials available in digital and other alternate formats.
- Request that any State technology plan or initiative include universally designed hardware and software and consider how technology can be used to support learning for ALL students.
- Encourage professional development opportunities for teachers regarding the use of UDL in the classroom.

- Encourage the State to provide pre-service training on UDL in their teacher education programs at State colleges and universities (for special and general educators) and to include knowledge about UDL in their licensure assessments.
- Encourage the State to create the expectation that the LEA's (school districts) will each develop a plan for implementing UDL.
- Advocate to add UDL to your Career and Technical Education State Plan. <https://www.cast.org/connect/newsroom/universal-design-for-learning-udl-cte-state-plan/>
- Advocate for UDL to be used in the design of anything produced using AI.

Local Level (LEA)

- Join other stakeholder groups to promote UDL.
- Hold a workshop on UDL for parents and other stakeholders.
- Provide information on UDL to the county council (or other governing board), school district officials (especially those in the curriculum department), school board members, principals, teachers and paraeducators (this can be done through private meetings, presentations at PTA meetings, testimony at hearings etc.)
- Encourage the LEA to add UDL to their strategic plan in consultation with experts in the field and stakeholders, including parents.
- Encourage the LEA to review curriculum objectives to ensure that they are universally designed. This includes providing objectives that do not limit the ways that students can demonstrate their knowledge. For example, do not include terms like "write" or "speak" in objectives which exclude certain students, unless the objective is focused on these abilities (e.g., how well a student writes or speaks)
- Encourage the use of universally designed district wide assessments and unit tests.
- If the LEA is involved in purchasing instructional materials, encourage selection policies that favor the purchase of materials that are available in digital and other alternate formats. This is a tool that supports the purchase, selection and evaluation of instructional materials that are online or have a digital component <https://www.montgomeryschoolsmd.org/siteassets/district/departments/hiat/udl/downloads/udlpurchasing-guidelines.pdf>

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- Encourage a partnership between the LEAS and the county library system regarding the provision of universally designed materials and access to digital text for students who go to the library for supplemental materials or to use a computer.
- Request that any LEA technology plan or initiative include accessible hardware and universally designed software and consider how technology can be used to support learning for ALL students
- Advocate for UDL to be used in the design of anything produced using AI.
- Encourage professional development opportunities for teachers regarding the use of UDL in the classroom.

Conclusion

UDL has proven to be a powerful framework to support lifelong learning. It improves opportunities for individuals with disabilities and their peers to fully participate and achieve at their highest levels in educational and employment settings. However, much still needs to be done to ensure UDL is properly implemented across these settings.

