

WHAT IS CAST?

CAST is a nonprofit education research & development organization that works to expand learning opportunities for all individuals through Universal Design for Learning (UDL).

WHAT IS UDL?

UDL is a research-based framework for designing learning environments—including instructional goals, assessments, methods, and materials—that simultaneously provide rich supports for learning, reduce unnecessary curricular barriers, and maintain high achievement standards for all students.

OUR WORK

Research and Development

Activities

- Supports and scaffolds for learning based on UDL principles
- Online learning
- Learning analytics and progress monitoring
- Authoring platforms for educators
- Affect, motivation, and engagement
- Executive function, attention, working memory

Selected projects

- Next Generation Literacy Ecosystem — Co-lead a \$10 million center to develop new digital tools for teaching adolescent literacy (Funder: US Department of Education)
- Composition Builder —Develop and evaluate an online writing tool for grade 6-8 students (Funder: US Department of Education)
- NSF Science Collaborative —Develop and evaluate UDL-based biology and chemistry curricula for grades 6-12 (Funder: National Science Foundation)

Growing the field of UDL

Systemic Change



Founded in 2009, the National UDL Center supports the effective implementation of UDL by connecting stakeholders in the field and providing resources and information about Universal Design for Learning. <http://www.udlcenter.org>



Founded in 2009, the AIM Center provides educators, parents, publishers, and others interested with information and technical support to meet the needs of students with print disabilities. <http://aim.cast.org>

WHAT IS UNIVERSAL DESIGN FOR LEARNING?

Universal Design for Learning (UDL) is a set of principles to develop learning environments that give all individuals equal opportunities to learn.

UDL proposes not a single, one-size-fits-all solution but rather a set of flexible scaffolds and supports that can meet individual needs. Individual learners are very different from one another and may require different methods and means to reach a common goal. These differences—both seen and unseen—may be

shaped by brain development, learned and innate skills, cultural and social experience, and a host of other factors.

The UDL framework encourages creating flexible designs from the start that have customizable options, which allow all learners to progress in the curriculum. The options for accomplishing this are varied and robust enough to provide effective instruction to all learners.

FRAMEWORK AND PRINCIPLES

Affective Networks

The “why” of learning



How learners get engaged and stay motivated. How they are challenged, excited, or interested. These are affective dimensions.

- Stimulate interest and motivation for learning

Provide Multiple Means of Engagement

Recognition Networks

The “what” of learning



How we gather facts and categorize what we see, hear, and read. Identifying letters, words, or an author’s style are recognition tasks.

- Present information and content in different ways

Provide Multiple Means of Representation

Strategic Networks

The “how” of learning



Planning and performing tasks. How we organize and express our ideas. Writing an essay or solving a math problem are strategic tasks.

- Differentiate the ways students can express what they know

Provide Multiple Means of Action & Expression