

Universal Design for Learning (UDL)

“Universal Design is not just a technique for special education; rather it is a technique to enhance the learning of all students.”

(Turnbull, Turnbull, Shank, Smith, & Leal, 2002, p. 92)

“With the premise that each student can benefit from a flexible curriculum offering clear goals, multiple pathways for reaching those goals, and fair and accurate assessment, the Universal Design Curriculum reflects an understanding that each learner is unique.”

(Hitchcock, Meyer, Rose, & Jackson, 2002, p. 20)

Universal Design for Learning (UDL) was inspired by work in architecture on the planning of buildings with a view to accessibility for people with physical disabilities (Turnbull et al., 2002). Architects observed that the added improvements facilitated access for all users, not just people with physical disabilities. An access ramp, for instance, provides a person using a wheelchair with easier access to a building, but it also makes it easier for a parent with a child’s stroller, a traveller with a baggage trolley, or someone using a walker.

Eventually, researchers in other fields noted that specialized technology meant for a target population is also useful for others. Subtitles originally designed to help people who are deaf or hearing impaired, for instance, now replace the sound of televisions in loud places such as airports and sports centres, or, inserted into films on DVDs, help teach languages.¹

The notion that assistance targeted at a specific group can help everyone, bolstered by recent research on inclusion and new technologies, has now made its way into the field of education. Educators have begun to realize that a teaching strategy or pedagogical materials that respond to the special needs of a specific student or group of students can also be useful for all students.

UDL is an orientation intended to shape teaching in order to provide all students with access to the curriculum (Turnbull et al., 2002). Its aim is to assist teachers in designing products and environments to make them accessible to everyone, regardless of age, skills, or situations.

UDL sees all learning as a continuum. Every student is unique, and will therefore benefit from a flexible curriculum that provides him or her with the appropriate pathways for reaching learning goals, as well as fair and accurate assessment.

A classroom based on the concept of UDL is specifically planned and developed to meet the special needs of a variety of students, including students who are disabled and those who come from a non-dominant culture. It is flexible, supportive, and adjustable, and increases full access to the curriculum for all students.

1. Information from this and the previous paragraph is from Hitchcock et al., 2002.

Core Concepts

“In a diverse classroom, no single method can reach all learners. Multiple pathways to achieving goals are needed.”

(Hitchcock et al., 2002, p. 18)

Universality and equity. UDL is intended to ensure that teaching will meet the needs of all students. This does not mean planning instruction for students with average achievement levels, and then making after-the-fact modifications to meet the special needs of certain students. UDL encourages teachers to develop a class profile and then plan, from the beginning, to provide means and pedagogical materials that meet the needs of all students and not only those with special needs. Classrooms accommodate all students and a wide range of instructional methods. While teaching, the teacher attends to the needs of each student, and guides him or her in making the choices best adapted to his or her needs. All students enjoy privacy, security, and safety. None is segregated or stigmatized.

Flexibility and inclusion. The planning of teaching and the time teachers allocate to students’ activities and needs must be sufficiently flexible to provide real learning experiences for all the students, regardless of their performance level. Students are accommodated through a variety of teaching strategies and pedagogical materials that make use of all the senses, technological media, assessment strategies, and ways of using space. Teachers can use a variety of techniques or devices to accommodate a variety of diverse students in their classrooms. Some students require right- or left-handed access, for instance, or the option to make oral versus written presentations.

An appropriately designed space. Teachers can make sure that:

- all students have a clear line of sight;
- resources such as dictionaries and texts are within comfortable reach of all students;
- there is adequate space for the use of assistive devices or teachers’ assistants;
- classroom tools accommodate variations in hand grip size;
- classrooms minimize distraction – students should be able to concentrate on instructional elements (such as posters on the wall) without having to process a plethora of other competing stimuli.

Simplicity. Teachers avoid unnecessary complexity by communicating consistent expectations, arranging information sequentially to clarify its relative importance, breaking instructions down into small steps, and providing effective feedback during and after tasks. They minimize distracting information in the classroom.

Safety. Classrooms must be safe, with minimal hazards and no elements that might cause accidents. The assessment of safety might depend on the specific children in the classroom. If any student has a safety plan or written safety protocol, every adult within the school needs to be aware of it and able to act on it.

How to Use UDL to Plan Your Teaching

UDL takes the many components of teaching into account:

- expectations and objectives of learning situations
- teaching strategies and learning situations
- pedagogical materials
- technological tools
- variety of products resulting from learning situations
- assessment

The following example, in which students are expected to be able to identify the components of the structure of a short story, illustrates the use of UDL.

Overall and specific objectives and expectations

The objective of reading a story could be understanding the structure of a story, analysing the values conveyed by the text, developing an enjoyment of reading that type of text, analysing its verb tenses, and so on. In this case, the teacher precisely communicates, through discussion, that the objective of this assignment is to understand the structure of a story. The teacher also provides the students with his or her expectations in terms of the quality of learning they must achieve.

Teaching strategies and learning situations

Once the teacher has defined overall and specific expectations and objectives, the teacher provides students with achievable challenges through a variety of flexible strategies or learning situations to meet the needs of the students in ways that are adapted to their skill level.

A student who has not had very much contact with short stories, for instance, might need to have stories read to him or her and to work with the teacher or a more advanced peer. Other students who are already familiar with the story type might benefit by working alone with stories. Students could also choose to start with a story and deduce its structure, while others could choose to start with the story structure and identify its components in a story. The teacher could suggest that students select one of the following:

- Join with the teacher and other students in discussing the structure of the story as the teacher reads it.
- Read the story yourself and try to describe the structure of the story, alone or in a team.
- Read the story and try to describe its structure guided by a poster prepared by the teacher that has general information about the structure of a short story (with examples).
- Write your own story, alone or in a team, applying the structure of a short story to it, guided by the poster.

Pedagogical materials

Pedagogical materials available to everyone may vary:

- *in form*: short stories in classroom books, audio versions, books on computer-based media, and books in braille or large print;
- *in level of difficulty*: stories of different lengths using various numbers of illustrations, stories with sentence structures of varying complexity, and so on;
- *in presentation*: fonts of different sizes and books of different sizes to facilitate their manipulation.

UDL integrates this variety of materials from the beginning of planning the teaching process. These materials should address multiple senses, individually or in combination, and could include text, pictures, graphs, mapping and images, sounds, voices, manipulatives, and so on.

Technological tools

Technology is used whenever necessary to facilitate students' learning. It includes a variety of technological tools that assist learning, such as computers, screens with enlarged display, audio books, hearing apparatus, and so on. Detailed information on assistive technology is presented in Chapter 10.

A variety of student products

UDL is meant to encourage a varied range of productions. Students could demonstrate their comprehension of the structure of the story by illustrating the main steps of the story, giving an oral presentation, or performing a dramatized version.

A similar approach is productive in mathematics. Table 7, A Sample Grade 1 Guided Mathematics Lesson, in Chapter 7 of this report, includes an example of how Universal Design for Learning might apply to mathematics. Instructional approaches in mathematics that allow the integration of concepts consistent with UDL include:

- using shared mathematics to explore a problem;
- using guided mathematics to model and guide through a specific concept;
- using concrete materials/manipulatives;
- making connections to a similar problem;
- using a math game that develops the concept and skills related to the activity or problem.

Assessment and evaluation

Teaching requires accurate knowledge of student progress. Assessment consistent with UDL is sufficiently flexible to provide accurate, ongoing information that helps teachers adjust instruction and maximize learning. A test given in a single medium inevitably tests mastery of that medium (Rose & Meyer, 2002). If a student is provided with accommodations in instruction, he or she frequently receives the same types of accommodations in assessment.