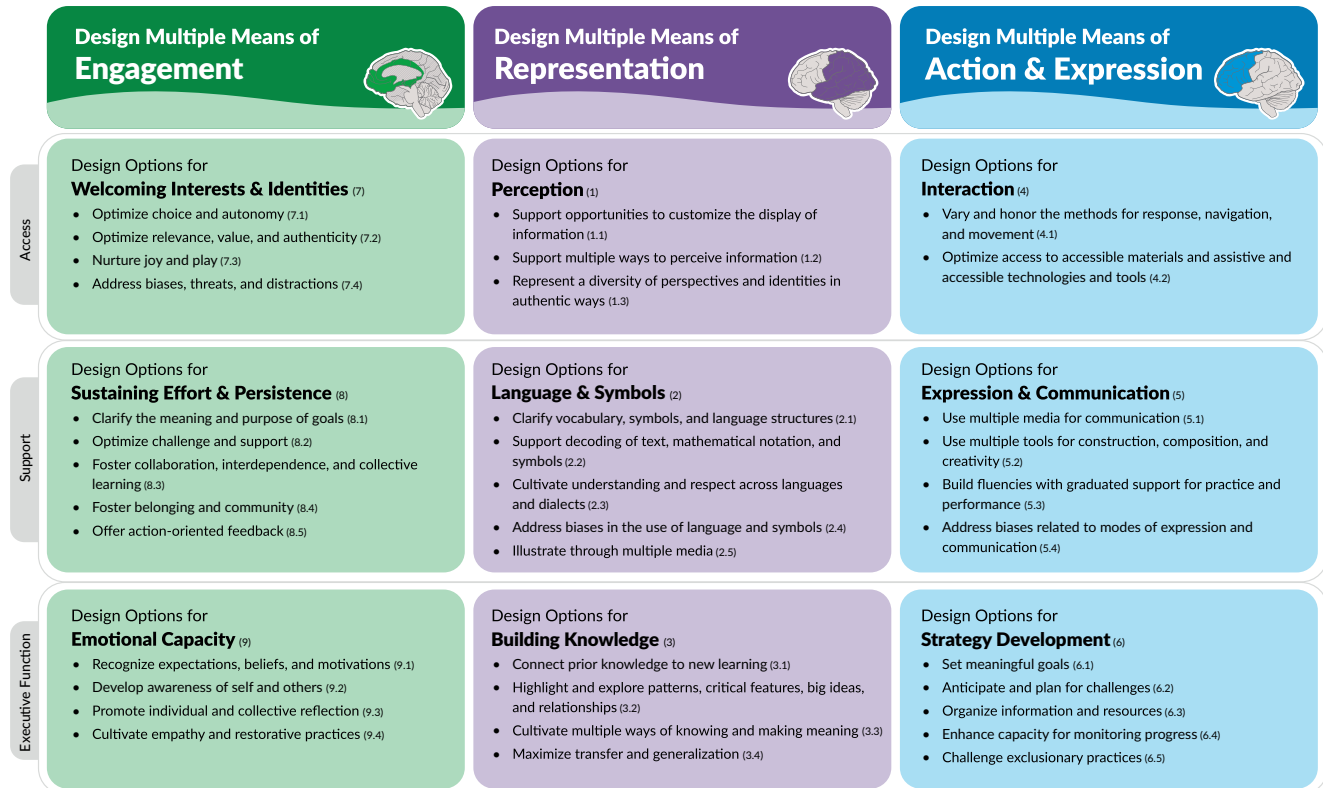# Universal Design for Learning (UDL)
"Design a Classroom for All"
- Emily Islip, M.ED, EL CPS

The Universal Design for Learning Guidelines

The goal of UDL is learner agency that is purposeful & reflective, resourceful & authentic, strategic & action-oriented.

Design Multiple Means of **Engagement**	Design Multiple Means of **Representation**	Design Multiple Means of **Action & Expression**
Access		
Design Options for **Welcoming Interests & Identities** (7) • Optimize choice and autonomy (7.1) • Optimize relevance, value, and authenticity (7.2) • Nurture joy and play (7.3) • Address biases, threats, and distractions (7.4)	Design Options for **Perception** (1) • Support opportunities to customize the display of information (1.1) • Support multiple ways to perceive information (1.2) • Represent a diversity of perspectives and identities in authentic ways (1.3)	Design Options for **Interaction** (4) • Vary and honor the methods for response, navigation, and movement (4.1) • Optimize access to accessible materials and assistive and accessible technologies and tools (4.2)
Support		
Design Options for **Sustaining Effort & Persistence** (8) • Clarify the meaning and purpose of goals (8.1) • Optimize challenge and support (8.2) • Foster collaboration, interdependence, and collective learning (8.3) • Foster belonging and community (8.4) • Offer action-oriented feedback (8.5)	Design Options for **Language & Symbols** (2) • Clarify vocabulary, symbols, and language structures (2.1) • Support decoding of text, mathematical notation, and symbols (2.2) • Cultivate understanding and respect across languages and dialects (2.3) • Address biases in the use of language and symbols (2.4) • Illustrate through multiple media (2.5)	Design Options for **Expression & Communication** (5) • Use multiple media for communication (5.1) • Use multiple tools for construction, composition, and creativity (5.2) • Build fluencies with graduated support for practice and performance (5.3) • Address biases related to modes of expression and communication (5.4)
Executive Function		
Design Options for **Emotional Capacity** (9) • Recognize expectations, beliefs, and motivations (9.1) • Develop awareness of self and others (9.2) • Promote individual and collective reflection (9.3) • Cultivate empathy and restorative practices (9.4)	Design Options for **Building Knowledge** (3) • Connect prior knowledge to new learning (3.1) • Highlight and explore patterns, critical features, big ideas, and relationships (3.2) • Cultivate multiple ways of knowing and making meaning (3.3) • Maximize transfer and generalization (3.4)	Design Options for **Strategy Development** (6) • Set meaningful goals (6.1) • Anticipate and plan for challenges (6.2) • Organize information and resources (6.3) • Enhance capacity for monitoring progress (6.4) • Challenge exclusionary practices (6.5)

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CAST (2024). Universal Design for Learning Guidelines version 3.0 [graphic organizer]. Lynnfield, MA: Author.

What is The Universal Design for Learning (UDL)?

The Universal Design for Learning (UDL) Guidelines are a "framework developed by CAST to improve and optimize teaching and learning for all students based on their learning from scientific insights into how humans learn (CAST, https://udlguidelines.cast.org/)." CAST first developed the framework for Universal Design for Learning in the 1990's, however since then they have continued to refine the framework with the most recent revision that was released in July of 2024.

"Universal" does not mean that the framework is a one size fits all program. "Universal" means that the curriculum and environment can be created so that all students have the opportunity to succeed. The goal for UDL is to empower each student to have "Learner Agency." Teachers give students the ability to own their own learning, not just participate in their learning. Classrooms that have high learner agency are classrooms where it is learner driven, students have choice in the activities and how to show their understanding of the material taught, students have independence, each lesson is purposeful, and the environment is active.

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3 Components of UDL

There are three principles that UDL is designed around. "The set of three principles are: multiple means of engagement where students are provided with multiple ways to engage in learning; multiple means of representation where students are provided with choice in how they access their learning; and multiple means of action & expression where students are given choice and flexibility in how they demonstrate or share their learning (Bray, Aibhin, et al, 2024)."
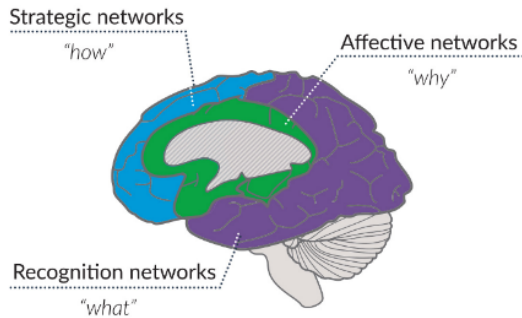
Engagement is the "why of learning" and is linked to the hippocampus section of the brain. This area of the brain supports memory, learning, navigation, and perception of space. It is important to provide choices and empower students to co-design their own learning and coping strategies. When students are motivated in their own learning, joy will return to the classroom.

Representation is the "how of learning" and is linked to the parietal, occipital and temporal lobe of the brain. These areas are linked to reasoning, language, reading, vision, speech, behavior, and short-term memory. Connecting a new learning concept with a previous concept learned can help a student better understand the new material. There are often multiple ways to solve a problem. By looking at and acknowledging these differences students can learn from one another and gain a deeper understanding of the content presented.

Actions and expression are the "what of learning" and are linked to the frontal lobe of the brain. This area of the brain is linked to decision making, movement, reasoning, behavior, memory and personality. It is important to understand that all students learn differently. Teachers must plan for challenges to happen within each lesson. It is helpful to provide students with a range of no-tech to high-tech options that honor learning preferences and differences.

Who Are Our Learners

Over the past decades there has been a trend of more diverse student populations in general education classrooms. With the implementation of the Individuals with Disabilities Education Act (IDEA) and No Child Left Behind (NCLB), it has shown that it is both beneficial and important to keep students in the general education classroom as much of the school day as possible. In addition to a more diverse student population, there is also a growth in the number of students that are enrolled in special programs and labeled under special populations.

According to Texas Educational Agency (TEA), over a 10 year period the number of students At-Risk of failing has increased 29.8%, students with Dyslexia has increased 3.4%, students serviced by special education programs have increased 59.5%, and student labeled Gifted and Talented have increased 17% (Texas Education Agency, Enrollment in Texas Public Schools, 2022-23. 2023). Each of these students, and other special populations, can and should be taught to the best of the school's abilities.
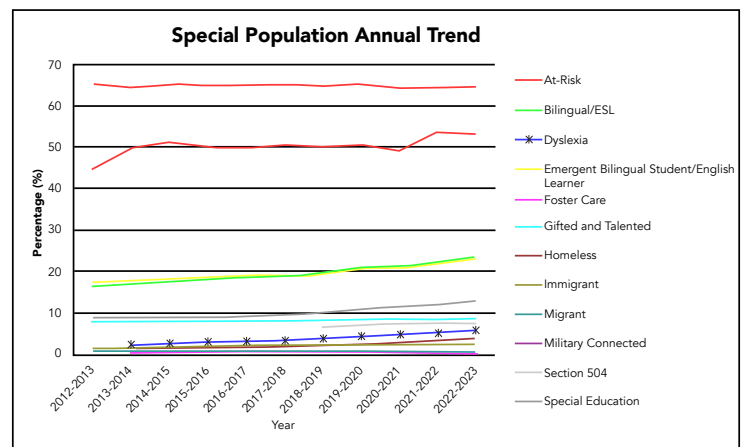
(Texas Education Agency, Enrollment in Texas Public Schools, 2022-23, 2023)

Removing the Barriers of the Classroom

Students come to school with a variety of backgrounds and learning abilities. The reality is that some students come with a higher aptitude to learn than other students. There is a growing number of students that require more support to achieve the same success that a typical general education student can achieve.
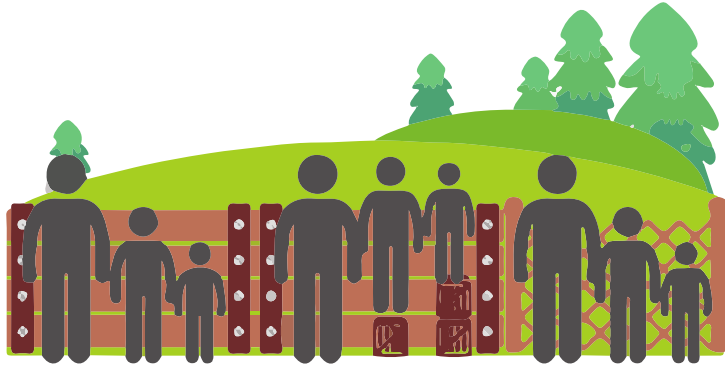
Equality   Equity   Inclusion

(Equality, Equity, Diversity and Inclusion-Making Sense of the Jargon. Equasense . 14 Nov. 2019)

Since each student that enters the classroom is unique and needs different accommodation, equality is not the right option. A teacher may teach a lesson to the whole class; one student may already understand the concept before the teacher even starts, while another still needs further instructions even after the lesson is complete. Just like a lesson, a standard school chair may not work for every student.

Schools often strive for equity for each student. They give each student the tools and accommodations they will need to be successful at school. What one student needs to succeed may be a hinderance for the next student. Students that have Attention Deficit Hyperactivity Disorder (ADHD) may find a movement seat to be extremely beneficial to their ability to focus during a lesson. However, a student that does not have ADHD may find it more distracting to have movement while they are trying to work. The learning and learning environment do not have to look exactly the same for every student.

Is equity enough? What UDL suggests is that schools strive for inclusion, removing the barriers that keep students from reaching their true potential. Each student should feel valued and involved in their own learning. Empower each student to understand what tools they need and how to advocate for themselves to get the accommodations they need to thrive in school.

UDL-Aligned Classroom Design

When selecting furniture and creating a classroom design with UDL Learning Guidelines in mind, focus on ergonomics, comfort, adaptability, flexibility, and mobility.
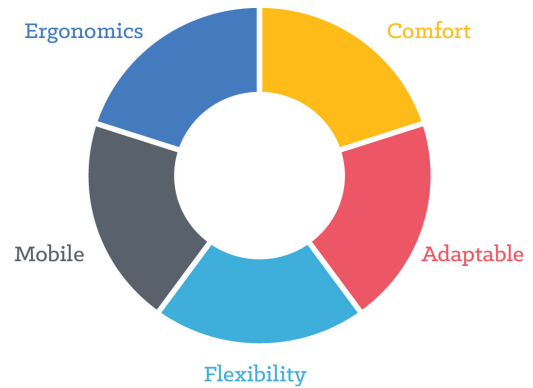
Flexibility

Having flexibility in seating options allows students the ability to choose the type of seat they require to learn and focus during the lesson. Chairs can provide movement and have a variety of seating positions. Seating options can include:

- Tradition 4-leg stacking chair
- Mobile chair on casters
- 360-degree movement stool
- Multiple position chairs
- Tall tables with stools
- Floor seating
- Soft lounge furniture

Accessibility and Ergonomics

Choose furniture for the classroom that is sized correctly for the students who will be using it. Furniture that is too big or small for the students will be uncomfortable and lead to a lack of focus. Add in furniture that complies with the Americans with Disabilities Act (ADA). The omission of ADA accessible furniture can attract attention to a student that needs more room. A student in a wheelchair may have a table to work at while the other students are sitting at individual desks. Add in an ADA sized desk that is only slightly larger than the traditional desk and has the same leg type, to make them feel part of the class.

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Comfort

Choose a variety of furniture that ranges from traditional to casual. Upholstered seating can provide students with a sensory experience different from sitting in a traditional chair. Some students may be extremely sensitive to sitting on a hard chair for extended periods of time. Allow a variety of options for students to sit on, from four leg chairs to upholstered seating.

Mobility

Provide furniture that is easy to reconfigure for individual, collaborative, or group learning. This furniture empowers the teacher or student to change the configuration of tables or desks easily. Collaborative desks can go from individual to pairs to small groups easily. This allows the teacher to give students control to form a grouping that will work best for them to focus and learn.

Configuration 1: Rows

Rows of desks can limit distractions for a student since there are only two students next to them, one to the left and one to the right.

Configuration 2: Small Groups

Small Groups emphasis group collaboration. With a small group a student who is hesitant to participate with a whole group will feel more confident in contributing.

Configuration 3: U-Shape

The u-shape configuration allows for easier whole group discussion. Students have an easier time seeing and hearing each other while discussing the teacher facilitated topic.

Adaptability

Furniture that can adapt to the needs of the students can help increase the inclusion of the classroom environment. In a classroom, consider a sit to stand desk. This allows a student to adjust their desk to the sitting height they need to work comfortably.

In addition to providing adaptable furniture, it is important to transition to different learning spaces. Working outdoors has proven to help students' focus. Providing students with outdoor furniture can accommodate all students, including those in wheelchairs, will allow for an easy transition to outdoor learning.

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Creating the UDL Classroom

Early Childhood Classroom

1. Engagement – Sustaining Effort & Persistence

Creating centers within the classroom will give young children control over their learning. Centers often include block play, dramatic play, library, math and manipulatives, science, language, and arts and crafts, which children will rotate through during the day. Young children often learn through play and providing various levels of play activities will help optimize challenges and support while they learn.

2.Engagement – Emotional Capacity

It is important for even young learners to have and recognize clear expectations. Placing cubbies by the entrance to the room allows the children to come into the room and know exactly where to place their personal items. This may be the child's first time in a school setting, and they often come with comfort items from home. Having space to place their home items allows them to feel comfortable knowing where they are and will not need to have them with them during the day.

3. Representation – Language & Symbols

An early childhood classroom is often set up in centers which help create clear expectations of the classroom routines. Creating centers with educational materials that focus on language, vocabulary development, mathematics, science, and social studies is important. Children are naturally inquisitive and will instinctively move from one center to the next.

4.Engagement – Welcoming Interests & Identities

A dramatic play center can easily provide joy and play to the classroom. Playful and bright color scheme along with items like a market will expand on their imaginative play. A puppet theater can give children an area to practice storytelling and retelling, which are the foundation to reading comprehension.

5. Representation – Perception

It is important to add books to the library that portray diversity, so that children can see themselves in the books and pictures as they read. Provide books that exhibit a variety of identities including (but limited to) gender, race, different abilities, nationalities, and socio-economic backgrounds. For young children who are learning to read it is important to provide a book display where they can see the front covers of the books.

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Elementary Classroom

1. Engagement – Welcoming Interests & Identities
Set up the classroom with desks that can create a variety of configurations, individual, small groups, and/or rows of desks. This allows the students to feel a sense of control when choosing their seat. Some students thrive in group work, while others may feel overwhelmed and distracted.

2. Action & Expression – Strategy Development
A well thought out storage system can help teachers anticipate and plan for organization challenges in the classroom. Having storage that can easily adapt to the changing needs of the classroom can be valuable. The students know where to find all the materials and technology and can access them as needed. They can work as a community and take pride in their classroom by using and putting away materials.

3. Engagement – Emotional Capacity
Create spaces within the classroom that allows students an area to regulate and reflect on their emotions when feeling over stimulated. Classroom activities and noise can be difficult and overwhelming for students, causing them to have big emotions, and unwanted behaviors. Adding soft furniture will help create a soft place to reflect. Including a privacy screen creates an area for a student to have personal space.

4. Representation – Building Knowledge
A group table provides a teacher with space to work with a small group of students on differentiated instruction. The teacher can use this space to work with the group by revisiting and reinforcing concepts the small group may be struggling with or expanding on the concepts for a group of students who are ready to dive deeper into the subject.

5. Action & Expression – Interaction
Adding a variety of seating options available to students is a way to optimize accessible materials and tools. Some students thrive with having seating options that give some movement. Adding a cantilever chair or a 360-degree movement stool can provide students with the movement they need to focus during a lesson. The intentional movement will not just help the student, but will also redirect the distracting behavior, keeping it out of sight from other students.

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Middle & High School Classrooms

1. Action & Expression – Interaction
Mobile write and wipe boards positioned around the room means there is no "front" of the room. This allows flexibility to be built into the classroom. If a student needs preferential seating, the teacher can change their location in the room rather than calling the student out.

2. Engagement – Welcoming Interests & Identities
It is essential to bring joy and play into all classrooms, even the middle and high school rooms. Create spaces in the classroom that allow all students to find joy and comfort as they learn. Soft seating can provide just this type of spot for students to sit, work and learn.

3. Action & Expression – Expression & Communication
It is important to allow students to use multiple tools for construction, composition, and creativity. There are so many different multimedia tools that have been designed to help diverse learners. Having a mobile storage unit that is well organized can help students be self-sufficient in finding, using, and returning the tools they need to be successful.

4. Action & Expression – Strategy Development
Allow students to practice and master their executive functions skills. Students need to learn strategies to make good decisions for their learning and self-regulation of emotions. The teacher can scaffold lessons and activities to help students work on these skills. A classroom can allow them different seating options and empower the students to make their own decisions about where they would learn best.

5. Engagement – Sustaining Effort & Persistence
Creating a room with large tables can create a space for students to collaborate, have interdependence, and learn from one another. It is important to facilitate student collaboration from daily activities to group projects. Each student, with varying learning abilities, brings something different to the group. Students must learn to work with others who are different from themselves.

Conclusion

There are a growing number of students that are labeled as special populations that will be serviced in a general education classroom. There are even many students that have learning difficulties in a classroom that are not labeled under any category. It is imperative that we create a learning environment that includes all the affordances needed for all students to learn.

Affordances in the classroom are resources or supports that can be offered to students to help them succeed during a lesson. "An affordance is not a characteristic of an object or tool, although the term is often used imprecisely in this way; it is a relationship between an object and a person (student) in a particular environment. Therefore, the same object can have different affordances for different people in different environments (Bray, Aibhin, et al, 2024)."

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For example, one student may find a tall stool as a spot for them to see and focus during the lesson presented. The second student may find the same stool as a hindrance since they are uncomfortable to their feet not touching the ground. A variety of furniture will allow the right affordance for each individual student and their learning needs.

When creating classrooms and learning environments it is important to offer a variety of furniture and technology that allow the students to choose where and how to learn, that best meets their needs. Providing and empowering each student to use the furniture and technology leads to the students having learner agency. Learner agency goal is for students to understand what they need to learn and to advocate for themselves.

The Universal Design for Learning Framework needs to continue to be studied in relation to the effectiveness of student success in learning. What is known now is that using this framework to give students agency, choice, and control of their learning and the learning environment brings joy, fun, and authenticity back into school. As students gain enthusiasm for school it can be assumed that they will also gain greater achievement in their academic career.

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