Big Idea: Make your program accessible and engaging to diverse learners.

Challenge: Imagine the students in your class. On average, what is their reading level? On average, how athletic are they? Musical? On average, what is their favorite topic to discuss? How successful are they at collaborative group work, on average? Who is the “average” student, really? You probably see a huge amount of variability that the idea of “average” doesn’t really capture.

When you prepare a lesson or activity, you may have the “average” student in mind, but certain individuals pop up as you think through the details. Juan loves song lyrics and also needs to move constantly. Carla is super quiet and doodles during reading or writing projects. Elmer gives up at the very mention of math homework, so you’re not sure if he knows his math facts, let alone algebra. You’re exhausted from staying up late trying to plan for all of these students, but you remain committed to high achievement for every one of them.

Solution: Universal Design for Learning

You don’t need 20 different lesson plans to provide “challenging, salient, and age-appropriate materials to students with a range of abilities” (Vanderbilt UDL module). For example, we often ask students to illustrate their writing only after the story or essay is completed. Yet for Carla, drawing before writing may actually help her generate ideas by expressing them visually first. To apply Universal Design for Learning (UDL), you would give the whole class the option of drawing first (with a time limit, if necessary) so that all students, including Carla, could express their learning through multiple modalities.

Another critical piece of UDL is developing activities with a meaningful purpose, so that children are engaged in their own learning. During homework time, use math to solve a real-world problem, starting with big questions rather than detailed calculations. Develop an activity for your class to predict how many of them will vote for a kickball party vs. a healthy pizza party. Take the vote by having students go to different places in the room, then calculate the percentages and graph the predicted and actual votes. Juan will be engaged because he will be moving to vote in different corners of the room; you will be able to see Elmer’s math thinking in action, and Carla can sketch the graphs.
Where did Universal Design come from?

Universal Design began with architects and product designers creating buildings and products that are more effective and efficient for diverse users. It is more cost-effective (and generally nicer looking) to design and install a ramp and elevators from the beginning than it is to add them to a building later. Even better, many different kinds of people will use those design features: parents with strollers, travelers with suitcases, and visitors who use wheelchairs.

Accessible Building Entrance

This framework became known as Universal Design – “The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.”¹ Universal design means that more people can use the product with less of a need for accommodations to access the building or use the product. For example, when a school building is designed with a ramp from the very beginning, there is no need to wrestle a special ramp into place each time a student with a wheelchair enters.

Try it: What universally designed products do you use in your day-to-day life? Do you see the flashing lights of the fire alarm even when you can’t hear it over the noise of an after-school dance party? When your arms are overflowing with groceries because you forgot your reusable bags, don’t you love that grocery store doors open automatically? Check out one groundbreaking company’s description of universal design for kitchen tools.

Universal Design for Learning Framework

Like Universal Design is a framework for “stuff”, Universal Design for Learning is a framework for teaching and learning. The main goal is to teach in a way that is as accessible as possible for as many learners as possible. First, develop relationships to foster inclusion in every sense of the word and explore and celebrate natural human diversity. Explore your own learning preferences by completing the Barsch Learning Styles Inventory.

Universal design for learning also minimizes the need for special accommodations or modifications by reducing the number of barriers to learning. The idea is to reach diverse students who have a lot of variability – this goes way beyond students with disabilities and includes those who are identified as gifted and talented, as English Learners, and those who have a range of learning preferences (that is, everyone!).

¹ Retrieved 4/24/13 from the Center for Universal Design  http://www.ncsu.edu/ncsu/design/cud/
Won’t some people still need something different?

Of course, sometimes accommodations (adaptations that change the form but not the substance of what is being learned) or modifications (adaptations that alter the substance) will be needed. For example, a sign language interpreter, text-to-speech software, a calculator, or Braille format may be used to ensure access to content or communication. A wheelchair itself is a specialized tool that not all people need to use. A goal of UDL is to minimize the need for accommodations or modifications by teaching in a way that reaches the widest range of students possible.

Apply the Principles of UDL

The three core principles of UDL are multiple (and flexible) means of:

1. Representation - How am I representing knowledge or skills to the learner?

2. Expression and Action—How is the child expressing their learning? What is the child doing?

   As teachers, it’s important to represent information in multiple ways and give students opportunities to express their knowledge in multiple ways. The National Center on UDL groups these multiple means of representation and expression into visual, auditory, tactile, and kinesthetic modalities. Aim to include at least two different modalities in a given lesson so that you can reach a variety of learners. You don’t need to provide each modality in every activity, as long as you offer each of the four major areas throughout the day.

3. Engagement: How does the material relate to and maintain the child’s interest?

How are effort, persistence, and self-regulation built in?

As an adult, how motivated are you to do paperwork that seems pointless? Probably not very motivated and you’re more likely to be engaged when you understand why you are doing something. As a teacher, focus on the outcome (objectives or goals) so you can figure out how to get to that outcome without getting stuck on how it is achieved. You can engage children by providing a clear purpose, activating or building their prior knowledge and making material relevant. Also, balance the excitement of novelty with the familiarity of routine, along with providing genuine choice. Choice can be as simple as choosing which order to do homework. Perhaps most importantly, give them an authentic purpose for learning.

Ask questions and encourage students to ask questions about how they like to learn. Have your students write a rap, complete with dance moves, to illustrate a math concept instead of doing worksheets. You may see Juan take a leadership role and at the same time get a sense of Elmer’s math skills.
Common Barriers and Solutions to Inclusion

**Representation**: How does the teacher represent information (knowledge or skills) to the learner?

<table>
<thead>
<tr>
<th>Barrier: Staff present information in only one format, usually verbal.</th>
<th>Solution: Present information in more than one modality (and keep instructions short &amp; direct).</th>
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<tbody>
<tr>
<td><strong>Example</strong>: “Good afternoon everyone, be sure you take out your pencils, put away your backpacks, take out your homework, oh, pass up your permission slips ....”</td>
<td><strong>Example</strong>: Laminate a list of “Ready for HW” steps and put it in the front of the room as you read it. Use dry-erase markers to add an unusual item, like a fire drill</td>
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**Expression and Action**: How does the child express their learning? What is the child doing?

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<th>Barrier: Students are expected to show understanding in one single modality</th>
<th>Solution: Students are invited to show understanding through multiple modalities</th>
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<td><strong>Example</strong>: “Please explain the rules of the new game to me”</td>
<td><strong>Example</strong>: “Please show me you understand the rules of the new game. You can explain, you can draw, or you can act them out.”</td>
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**Engagement**: How does the material relate to and maintain the child’s interest? How are effort, persistence, and self-regulation built in to the lesson?

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<th>Barrier: Staff plan lessons/activities without considering students’ interests or background knowledge</th>
<th>Solution: Staff get to know students through informal chats, surveys, observation and play lessons/activities that incorporate student interest. Offer deliberate, intentional choice.</th>
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<td><strong>Example</strong>: Providing math worksheets with no context or authentic purpose</td>
<td><strong>Example</strong>: Generate math word problems based on video game characters (students can even create the problems themselves!)</td>
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**Summary**
This UDL framework empowers teachers and learners by creating an environment that respects and accommodates diverse learning styles. Implementing UDL well means more students are served well, with fewer special accommodations. Out-of-school-time staff are in a fantastic position to implement UDL because you already put a lot of effort into a very important part of UDL: learner engagement. This is especially true for programs that use the Learning in After School principles. Remember that the actions of individual staff can add up to program and school-wide changes that make inclusion a reality.

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