Universal Design for Learning: Questions and Answers

What is Universal Design for Learning?

Universal Design for Learning (UDL) is a research-based framework for designing curricula—that is, educational goals, methods, materials, and assessments—that enable all individuals to gain knowledge, skills, and enthusiasm for learning. This is accomplished by simultaneously providing rich supports for learning and reducing barriers to the curriculum, while maintaining high achievement standards for all students.

How does Universal Design for Learning help teachers in real classrooms?

From pre-kindergarten to graduate school, classrooms usually include learners with diverse abilities and backgrounds, including students with physical, sensory, and learning disabilities, differing cultural and linguistic backgrounds, varied preferences and motivations for learning, students who are unusually gifted, and many others.

Universal Design for Learning supports teachers’ efforts to meet the challenge of diversity by providing flexible instructional materials, techniques, and strategies that help teachers differentiate instruction to meet these varied needs. It does this by providing options for

- Presenting information and content in different ways (the “what” of learning)
- Differentiating the ways that students can express what they know (the “how” of learning)
- Stimulating interest and motivation for learning (the “why” of learning)

A universally designed curriculum is designed from the outset to meet the needs of the greatest number of users, making costly, time-consuming, and after-the-fact changes to curriculum unnecessary.

How does Universal Design for Learning help guarantee students equal opportunities to learn?
Both IDEA and NCLB recognize the right of all learners to a high-quality standards-based education. The laws preclude the development of separate educational agendas for students with disabilities and others with special needs. They also hold teachers, schools, districts, and states responsible for ensuring that these students demonstrate progress according to the same standards.

Neither law adequately addresses the greatest impediment to their implementation: the curriculum itself. In most classrooms, the curriculum is disabled. It is disabled because its main components—the goals, materials, methods, and assessments—are too rigid and inflexible to meet the needs of diverse learners, especially those with disabilities. Most of the present ways to remediate the curriculum’s disabilities—teacher-made workarounds and modifications, alternative placements etc.—are expensive, inefficient, and often ineffective for learning.

By addressing the diversity of learners at the point of curriculum development (rather than as an afterthought or retrofit), Universal Design for Learning is a framework that enables educators to develop curricula that truly “leave no child behind” by maintaining high expectations for all students while effectively meeting diverse learning needs and monitoring student progress.

**How does UDL address the core principles of No Child Left Behind?**

Universal Design for Learning supports:

- Greater accountability by guiding the development of assessments that provide accurate, timely, and frequent means to measure progress and inform instruction for all students.
- Greater flexibility and choice for teachers, parents, and students by guiding the development of curricula that provide high expectations for every student and meaningful choices to meet and sustain those high expectations.
- Greater use of evidence-based practices by guiding the design of high-quality curriculum that include research-based techniques for all students, including those with disabilities.

**How does Universal Design for Learning help maintain high standards and goals for every learner?**

Universal Design for Learning supports the idea that all students in all grades should have the opportunity to become proficient learners of standards-based academic content. Standards and goals, like classroom materials, require careful design so that they do not limit the kinds of learning that can result, or limit the kinds of students who can achieve success. Well-designed standards and goals maintain high expectations but expand the ways in which those objectives can be reached (e.g. using different tools, different media, or different approaches).
Providing multiple ways to attain high standards, rather than lowering them, is consistent with both standards-based reform and UDL.

**How does Universal Design for Learning apply to assessments?**

Test results often say as much about the medium of the test—usually paper and pencil—and its limitations as they do about what students really know. On the contrary, applying the principles of Universal Design for Learning (that is, variety in the what, how, and why of learning) enables us to create assessments that measure knowledge and skills in meaningful, more accurate ways.

For example, in assessing a student’s ability to write a coherent narrative (i.e., create one in text), we might provide the same kinds of options that business people use everyday to write, such as voice recognition and word processing, while also leveraging other media, such as images and sound, to scaffold motivation and enhance the narrative. By providing many ways for an individual to approach the “writing” task—options that, in the digital age, are commonplace—we achieve a more honest assessment of student progress.

Assessments in our digital age should be dynamic and universally designed. When we provide a full range of customizations and adaptations as a part of assessments, we are able to more accurately evaluate both student performance and the processes that underlie that performance.

**What are the differences between assistive technology and Universal Design for Learning?**

Children with physical or language disabilities may need properly designed wheelchairs, adaptive switches, speech synthesizers, and other assistive devices. Assistive technologies will always have a role in the education of learners with disabilities, and Universal Design for Learning will not eliminate the need for personal assistive devices.

However, exclusive emphasis on assistive technologies places the burden of adaptation on the learner, not the curriculum. The idea that students must procure or be prescribed special individual tools whenever they cannot use standard curricula essentially burdens the victims of poor curriculum design. Curricula should be flexible enough to meet the needs of the greatest possible variety of learners.

As Universal Design for Learning becomes more viable and pervasive, the power of assistive technology can be devoted to providing more efficient interaction with a curriculum that is already access-aware. For students who need it, assistive technology will no longer be required to overcome barriers in a poorly-designed curriculum, but will enhance active interaction with a curriculum that has been designed at the outset to be accessible to all.
Can states and/or school districts design their own universally designed materials?

Yes. The source of UDL materials is not important – they may come from publishers, state departments of education, educational technology producers, school districts or even individual teachers. The design of UDL materials is what is important. The key to successful UDL materials is that, whoever produces them, they should: 1) Address appropriate state and district standards, and 2) Follow appropriate guidelines for the design and development of UDL materials.

If my district, school, or teacher does not have universally designed curricula, can the objectives be altered to make them more accessible?

No. Not in isolation. One of the key tenets of UDL is the critical importance of maintaining consistently high standards and objectives for every student. The danger of altering objectives, especially on an individual basis, is that some students, especially those with disabilities, will consistently face the tyranny of lowered expectations. Instead, it is important to revisit goals and objectives as part of an overall reform of the curriculum. Objectives, like materials, require careful universal design so that they do not limit the kinds of learning that can result, or limit the kinds of students who can achieve success. Well designed objectives maintain high expectations but expand the ways in which those objectives can be reached (e.g. using different tools, different media, or different approaches). Providing multiple ways to reach goals, rather than lowering them, is consistent with both standards-based reform and UDL.

IDEA mentions the National Instructional Materials Accessibility Standard (NIMAS). How does NIMAS support Universal Design for Learning?

The most common learning technology in classrooms—the printed textbook—raises many barriers for students who have disabilities or other differences. Students who are blind or dyslexic for example, find many barriers to learning in such textbooks.

The key to Universal Design for Learning is maximizing flexibility—in materials, in learning strategies, and in assessments—that both reduce barriers and provide alternative paths to the same high standards for all students.

IDEA ’04 made an important first step in ensuring the flexibility of classroom materials by establishing the National Instructional Materials Accessibility Standard (NIMAS). NIMAS (pronounced NYE-mas) helps state and local education agencies meet IDEA’s mandate to provide qualified students with alternate-format versions of core curricular materials, such as textbooks.
The digital “NIMAS” version is very flexible and can be readily transformed into student-ready versions for students with a variety of different “print disabilities.” The flexibility of the NIMAS versions provides a great foundation for Universal Design for Learning. NIMAS does not meet the needs of all students, however. In the future, NIMAS will be seen only as the first step toward full Universal Design for Learning.

**Does Universal Design for Learning replace curriculum modification?**

Modifying existing general curriculum has long been the primary way to create more accessible learning environments to support all students and their teachers in various educational contexts.

However, curriculum modification can be problematic. For one thing, modifying the general education curriculum is a challenging and time-consuming process, especially when the task is left to individual teachers. Few teachers have the time, resources, or training to modify curricula effectively. In addition, many modifications may not provide adequate instruction to the neediest students—which may violate such students’ right to equal opportunities to learn from a high-quality curriculum.

Replacing barriers in the curriculum with flexible learning options for teachers and students through Universal Design for Learning may be a more effective way to ensure that all students, including those with disabilities, make the kind of academic progress envisioned by NCLB and IDEA.

**Are classroom materials based on Universal Design for Learning already available in the marketplace?**

There are some but not many. However, many organizations and companies are referencing Universal Design for Learning as a needed model for the development of more effective learning materials, including Kurzweil, Scholastic, Pearson Education, and others.

One especially promising program is Scholastic/Tom Snyder’s Thinking Reader® editions of leading middle-school novels. These digital books—titles such as *The Giver*, *Tuck Everlasting*, *Bridge to Terabithia*—provide built-in supports based on reciprocal teaching, which two decades of research has shown to be an effective approach to reading comprehension instruction.

The Thinking Reader editions include supports for physical access, such as text-to-speech and synchronized highlighting features. They also include supports for intellectual/cognitive access: reading-strategy prompts, model answers, background knowledge, and vocabulary support. All of these can be accessed and responded to in multiple ways, depending on what students need.

---

1 Disclosure: As developer of the research prototype on which Thinking Reader is based, the author of this paper, CAST, receives a royalty from Thinking Reader sales.
Progress monitoring tools also help teachers identify who is learning—and who needs more individual attention. These are powerful supports for teachers and students that technology makes possible in a busy classroom setting.

**Does it cost more to adopt Universal Design for Learning?**

To answer that question, it is essential to ask “more than what?” There are certainly new costs associated with implementing UDL. But those costs can only be estimated when compared to the costs of NOT implementing Universal Design for Learning.

Consider the building of a new school. Hiring a qualified architect to plan the building is an additional cost. But that cost must be compared with the costs—financial, aesthetic, functional—of NOT hiring an architect. In constructing buildings, as in most other cases, the initial costs of getting the job done right are usually less expensive than the alternative.

Likewise when “building” curriculum, we need to consider the costs of implementing and NOT implementing Universal Design for Learning. The following table sketches the likely comparison between those costs.

**Table 1: Comparing the Costs of UDL with not doing UDL**

<table>
<thead>
<tr>
<th>Curriculum Development and Design</th>
<th>The costs of doing UDL are higher</th>
<th>The costs of NOT doing UDL are higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan, research, design, and develop the general education curriculum.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Plan, research, design, and develop alternative or supplemental curricula for special education students.</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Produce, distribute, store, revise and update existing curricula for both special and regular students.</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**Curriculum Modification, Adaptation and Accommodation**

| Produce and distribute general education materials in accessible formats (Braille, large print, talking books, etc) |                                 | ✓                                     |
| Locally develop (in each state, district or school) parallel versions of approved modifications, adaptations and alternative materials. |                                 | ✓                                     |
Simultaneously develop (by thousands of individual teachers and aids) non-standard adaptations, activities, accessible materials, etc, for classroom and individual use.

### Instructional Technology Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing and maintaining modern technology - for schools that lack adequate technology – to support UDL.</td>
<td>☑️</td>
</tr>
<tr>
<td>Purchasing and maintaining modern technology – for schools that do not practice UDL – to prepare students for 21st century.</td>
<td>☑️</td>
</tr>
<tr>
<td>Purchasing assistive technologies, remedial software, supplemental print technologies, etc. for students with disabilities or other students with special needs.</td>
<td>☑️</td>
</tr>
</tbody>
</table>

The costs of doing UDL are higher

### Teachers and Teacher Training

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training regular teachers to use UDL methods and materials within the general education curriculum.</td>
<td>☑️</td>
</tr>
<tr>
<td>Hiring special education teachers to remediate, support, or accommodate students for whom regular curriculum is inaccessible.</td>
<td>☑️</td>
</tr>
<tr>
<td>Training regular education teachers to differentiate instruction and/or to adapt the general education curriculum for students with disabilities (without available UDL).</td>
<td>☑️</td>
</tr>
<tr>
<td>Training special education teachers to provide standards-based content-area instruction within the general curriculum.</td>
<td>☑️</td>
</tr>
<tr>
<td>Training regular and special education teachers to collaborate in differentiating instruction within the general curriculum.</td>
<td>☑️</td>
</tr>
</tbody>
</table>

### Long Term Societal Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social and economic costs (re-training, unemployment, incarceration) of failing to prepare all students with basic skills and literacies.</td>
<td>☑️</td>
</tr>
<tr>
<td>Social and economic costs of failing to prepare all students for the multiple literacies and media skills they will need in the 21st century.</td>
<td>✔</td>
</tr>
</tbody>
</table>