



Supporting Universal Design for Learning with Listening

Universal Design for Learning (UDL) is a research-based framework for developing and delivering curriculum that meet the needs of diverse learners. Just as the universal-design features of modern buildings accommodate the needs of varied users—for example, curb cuts, automatic doors and built-in ramps are helpful to those with and without disabilities—so too do universally designed learning environments offer a wide range of supports for all kinds of learners (Rose & Meyer, 2002).

Brain imaging studies reveal three distinct neural networks at work in the learning brain: recognition networks, strategic networks, and affective networks (Rose & Meyer, 2002). UDL suggests providing enough variety and options to support each individual's learning needs and styles. Listening supports the UDL approach in the following ways:

- **Recognition networks** orchestrate the gathering of facts and information—the “what” of learning. UDL suggests representing information and knowledge in a variety of ways.

Since most of us learn to listen before we can speak, read or write, listening can be an effective means of delivering core academic content that ordinarily might be offered only through the medium of printed text. New media, such as text-to-speech software and audio files, provide access to content in a form that may be more flexible and efficient at meeting the needs of certain diverse learners (Meyer & Rose, 2005). For those who

struggle to follow lectures, recorded text can be slowed for better processing, then sped up as recognition proficiency increases.

- **Strategic networks** aid us in planning and executing tasks—the “how” of learning. UDL calls for providing multiple approaches to learning tasks and variety of expression.

Listening also provides strategic options that can benefit most learners, even those very astute at interpreting written text. For example, students listening to a text or lecture are left free to take notes or visually compare what they are hearing to a different written text or visual resource, without the need to stop reading and redirect their eyes and attention.

Listening may pose strategic challenges; speech is transient, and it can be difficult to remember everything that is said for long enough to fully process it. Fortunately, multimedia can ease these difficulties by linking listening with accompanying text. With the ability to review audio that has already been listened to, listening is an even easier way to learn (Meyer & Rose, 2005).

- **Affective networks** determine our motivation, interest and emotional connection to learning—the “why” of learning. To support diverse affective networks, UDL calls for appropriate means of engagement. For most (but not all) students, having some choice of “what” and “how” makes the “why” easier to answer (Meyer & Rose, 2005).

In an increasingly audio culture where MP3 players, satellite radio and cell phones are staples in student backpacks, listening offers new ways to engage students in learning

(Meyer & Rose, 2005). Students who feel uncomfortable in an academic setting may accept listening as a more “natural” or comfortable way of receiving information, like listening to a story told by a friend or relative. With digital media, educators can offer students choices and control over the pace and approach to certain assignments. This, in turn, may make learning more enticing to learners who need new entry points to learning content and skills that they otherwise see as “old fashioned.”

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References

- Meyer, A., & Rose, D.H. (2005). The future is in the margins: The role of technology and disability in educational reform. In D.H. Rose, A. Meyer, & C. Hitchcock (Eds.) *The universally designed classroom: Accessible curriculum and digital technologies*. Cambridge, MA: Harvard Education Press.
- Rose, D.H., & Meyer, A. (2002). *Teaching every student in the digital age: Universal Design for Learning*. Alexandria, VA: ASCD.

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