

Why Adopt UDL? 4 Issues Addressed

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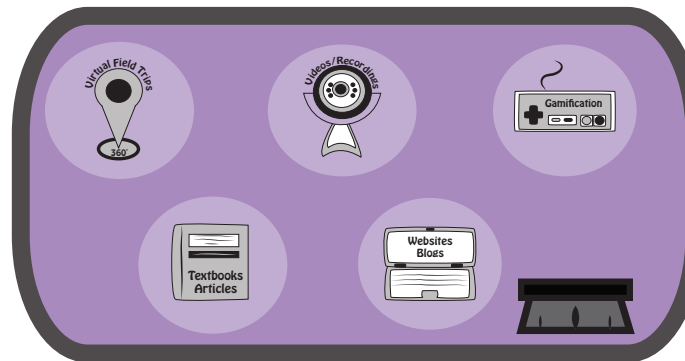
ISSUE: Laws & Lawsuits

- **§504 - Rehabilitation Act of 1975** Obliges accommodations for individuals with disabilities^[1]
- **Title II - Americans with Disabilities Act of 1990** Enforces reasonable modifications to services, programs, and activities and effective communication with all^[2]
- **§508 - Rehabilitation Act Amendments of 1998** Requires digital access for all, regardless of disability^[3]
- **Numerous Settlements and Resolutions** Clarify that institutions should design their activities and format their materials in an inclusive way^[4]

The UDL framework helps us design our online courses for accessible learning^[5], removing potential barriers and replacing them with more efficient and effective options as technology progresses, which benefits all learners universally^[6].



Principle I
Multiple Means of Representation



ISSUE: Learning Continuum

- **Multisensory Learning Modes** Although very little research exists to prove learners best retain information presented in their learning styles^[10], a wealth of empirical evidence suggests presenting information in multisensory modes can support learning^[11]
- **Factors Affecting Learning** Encoding, spacing, interleaving, testing, transferring, forgetting, and thinking metacognitively are hallmark principles of effective long-term learning^[12]; course structure, instructor interaction, and discussions are vital influencers of e-learning^[13]

The UDL framework supports learning through multimodal input by encouraging various means of representing information, through interaction and multisensory output by asking for learners to express what they know in diverse ways, and through long-term learning principles by engaging learners in their learning process^[14].

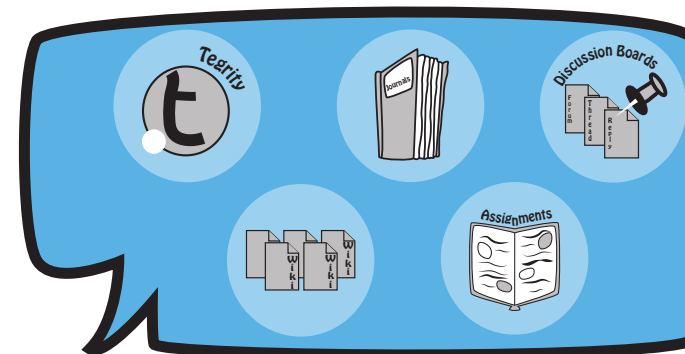
ISSUE: Tiers 1 & 2 Instruction

- **Tier 1 Instruction** Comprised of research based curriculum design and implementation of high-quality instructional practices for all learners
- **Tier 2 Intervention** Includes accommodations to Tier 1 instruction designed for learners with exceptional educational needs

The UDL framework strengthens Tier 1 instruction by creating a foundation that is grounded in current education, psychology, and neuroscience research^[7] and by building frequent assessment measures into the curriculum design^[8], which may lessen the overall need for extraordinary measures in accommodating learners with exceptional needs^[9].



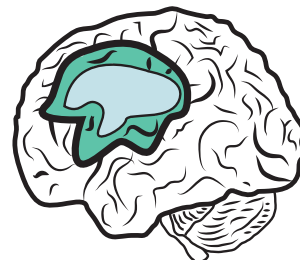
Principle II
Multiple Means of Expression



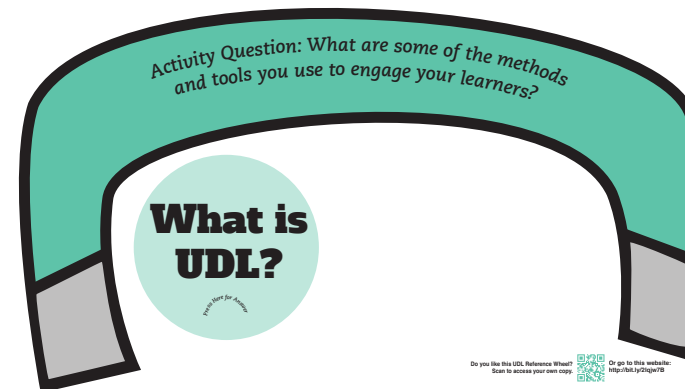
ISSUE: 21st Century Skills

- **21st Century Skills** Classified by actions or quality indicators in content knowledge and 21st century themes; learning and innovation skills; information, media, and technology skills; life and career skills^[15]
- **21st Century Tools** Categorized by their role in collaboration, communication, creativity, critical thinking, feedback, innovation, presentation, problem solving, productivity, reflection, and social networking^[16]

The UDL framework creates learning environments that are conducive to the practice of 21st century skills by representing content in a variety of ways using 21st century tools, embracing a range of skills through expressive choice, and strengthening learners' ability to plan, execute, and monitor skill sets^[17].



Principle III
Multiple Means of Engagement



REFERENCES

- [1] Cornell University Law School Legal Information Institute (n.d.). Nondiscrimination under federal grants and programs. *U.S. Code Title 29 Chapter 16 Subchapter V*. Retrieved from <https://www.law.cornell.edu/uscode/text/29/794> [2] United States Department of Justice Civil Rights Division (2016). Revised final Title II regulation with integrated text. *Nondiscrimination on the Basis of Disability in State and Local Government Services*. Retrieved from https://www.ada.gov/regs2010/titleii_2010/titleii_2010_regulations.htm#title2regs [3] United States Department of Health & Human Services (1998). Section 508 of the Rehabilitation Act. Section 508. Retrieved from <https://www.section508.gov/section-508-of-the-rehabilitation-act> [4] CAST (n.d.). UDL on campus: Legal obligations for accessibility. *Accessibility and Policy*. Retrieved from http://udioncampus.cast.org/page/policy_legal#.WkV5BSjNYg [5] CAST (2011). Universal design for learning guidelines version 2.0. Retrieved from [http://www.udcenter.org/sites/udcenter.org/files/UDL_Guidelines_Version_2.0_\(Final\)_3.doc](http://www.udcenter.org/sites/udcenter.org/files/UDL_Guidelines_Version_2.0_(Final)_3.doc) [6] Pace, D., & Schwartz, D. (2008). Accessibility in post secondary education: Application of UDL to college curriculum. *US-China Education Review Online Submission*, 3(12), 20-26. [7] National Center on Universal Design for Learning (2011). Research evidence. *Research*. Retrieved from <http://www.udcenter.org/research/researchevidence> [8] CAST (2015). Top 10 UDL tips for assessment. *Professional Learning*. Retrieved from <http://castprofessionallearning.org/wp-content/uploads/2015/12/cast-10-assessment-2015-10-20.pdf> [9] Kumar, K. L., & Wideman, M. (2014). Accessible by design: Applying UDL principles in a first year undergraduate course. *The Canadian Journal of Higher Education*, 44(1), 125-147. [10] Howard-Jones, P. A. (2014). Neuroscience and education: Myths and messages. *Nature Reviews Neuroscience*, 15(12), 817-824. [11] Najjar, L. J. (1998). Principles of educational multimedia user interface design. *Human Factors*, 40(2), 311-323. [12] Benjamin, A. (2017). Factors influencing learning. In R. Biswas-Diener & E. Diener (Eds.), *Noba textbook series: Psychology*. Champaign, IL: DEF publishers. DOI:nobaproject.com [13] Swan, K. (2001). Virtual interaction: Design factors affecting student satisfaction and perceived learning in asynchronous online courses. *Distance Education*, 22(2), 306-331. [14] Enome, Inc. (2016). *Goalbook toolkit. UDL Strategies*. Retrieved from <https://goalbookapp.com/toolkitstrategies> [15] Partnership for 21st Century Learning (n.d.). Framework for 21st century learning. *Our Work*. Retrieved from <http://www.p21.org/our-work/p21-framework> [16] University of Houston College of Education Laboratory for Innovative Technology in Education (n.d.). New technologies & 21st century skills. Retrieved from <http://newtech.coe.uh.edu> [17] Rose, D. H., Harbour, W. S., Johnston, C. S., Daley, S. G., & Abarbanell, L. (2006). Universal design for learning in postsecondary education: Reflections on principles and their application. *Journal of Postsecondary Education and Disability*, 19(2), 135-151.