

Instructional Unit#4: 2nd Revision

Instructional strategies for faculty training in universal design for learning

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Specific Goal

After completing the UDL Workshop (CN), participating faculty will be able to: identify the three networks of the brain (B), describe the three guiding principles of UDL (B), and integrate UDL principles into their lesson designs (B) to support students in various learning scenarios (CR).

Overview

This instructional unit was created to teach Northeast ISD faculty about Universal Design for Learning (UDL). The workshop is voluntary for professional educators employed by the district, and participants earning a 70% or higher score on the Post Test will be given Teacher Choice hours to use as Comp Time toward days they were scheduled off during the week of Thanksgiving. As a codicil of employment, faculty is required to complete basic technology proficiency exams and, therefore, it can be assumed they hold fundamental computer knowledge. All faculty are also required to hold certificates in teaching through the Texas Education Agency and be highly qualified in their content area, therefore they will be able to isolate the essential elements of the Texas Essential Knowledge and Skills for developing their own lessons. The development of this UDL Workshop is part of a larger district initiative focus on fostering a supportive environment of Universal Design for Learning across all campuses. This revised fourth section of the instructional unit encompasses the following:

1. Instructional Strategies
2. Media and Delivery Method
3. Instructional Materials

Instructional Strategies

This instructional unit has been revised. The previous model centered around a face-to-face teaching model. This has been adjusted to reflect a self-paced online module in the non-threatening environment of a website at <http://lgassistivetech.weebly.com/> which guides the learners through each step of the UDL Workshop. This site provides embedded UDL supports as the learners traverse the materials. If I choose to upgrade to the professional version of this site in the future, it is possible to embed further UDL supports, such as audio for the text.

Pre-Instructional Strategies

As a demonstration of Universal Design for Learning, an Agenda (Appendix I) has been created in a UDL style and is downloadable from the front page of the site. This is provided because some students learn best with a paper copy of materials and others learn best when provided with a schedule in advance, therefore it attends to learning needs for an array of students. To activate the recognition network of the brain and to demonstrate knowledge gained through the workshop, learners will print and complete a ten-question Anticipation Guide by noting if they are in agreement with a given statement both before and after the UDL Workshop. The Anticipation Guide can be found in Appendix II. After documenting their initial skills on the Anticipation Guide, learners will navigate to the next piece of the online learning module. A five minute closed caption video on the power of UDL (Appendix III), created by Seattle Central Community College and available at <http://youtu.be/4FE1CLS7i3k>, will be shown to build a foundational understanding of the impact UDL can have on students. I have developed a self-check quiz based on this video at <http://www.proprofs.com/quiz-school/story.php?title=how-well-did-you-understand-the-udl-video> and have embedded it into the webpage just below the video.

Content Presentation

The UDL Workshop is an online module at www.lgassistivetech.weebly.com . Learners are led through the course at their own pace, with UDL supports embedded to create a more supportive environment.

Learner Participation

The learners will be encouraged to engage in self-assessments, forums, and interactive tutorials throughout the workshop to facilitate a deeper understanding of UDL. Through the forum, learners contributing their experiences with barriers which previous students in their classrooms have faced will stimulate their own professional growth and broaden the scope of knowledge for their peers.

Assessment

For self-assessment throughout the UDL Workshop, learners will be asked to complete an Anticipation Guide before beginning, and then to revisit that and document knowledge they have gained, as well as embedded short quizzes based on current material they have reviewed. At the completion of the UDL Workshop, the learners will engage in a Post Test embedded into the UDL Workshop online module. The results of this Post Test are automatically tabulated and available for student and instructor review and learners may make repeated attempts to earn a minimum score of 70%, as necessary, to earn Teacher Choice credit for this professional development endeavor.

Follow-Through Activities

The participants will be encouraged to schedule a campus visit with Lorrie García to support the implementation of UDL into their lesson plan development and to build a relationship of ongoing support. They will be encouraged to sign up for a free CAST.org account and multiple resources are posted on the final page of the online module for learners to have available.

Media and Delivery Mode

Throughout the UDL Workshop, the learners will be presented with multimodal representations of the material. They will have access to hard copies of the materials, be shown a video with closed captions, engage in online forum conversations about their experiences with barriers to student success, and take short self-assessments to review their own understanding before they move on to the next section.

Summary

This instructional unit is designed to introduce Northeast ISD faculty to the tenets of Universal Design for Learning. The UDL Workshop incorporates UDL ideology into the agenda and each activity to demonstrate simplified methods of making lessons accessible to an array of learners. The learners will be asked to complete the Anticipation Guide and then revisit that at the end of the thirty minute session as a method of assessing their own learning, as well as for district data collection. A video will be viewed lauding the value of UDL for students at a community college. After the video, the learners will be led into a short quiz to assess their understanding. The students will then participate in an online tutorial about the three brain networks, they will compare their current lessons to UDL Guidelines, and submit their experiences to a Forum discussion about learners in their classrooms and the barriers they have faced through disability,

language, environment. The final Post Test will assess their overall understanding of Universal Design for Learning.

References

Anderson, E. A. (2011, October 31). *Cast: Udl*. Retrieved from <http://cast.org/udl/index.html>

Dick, W, Carey, L, & Carey, J. (2005). *The Systematic design of instruction (6th ed.)*. Boston, MA:Pearson.

Maryland State Department of Education. (2012). *Universal design for learning*. Retrieved from <http://udlwheel.mdonlinegrants.org/>

Seattle Central Community College. (2011). *Universal design*. [Web Video]. Retrieved from <http://youtu.be/4FE1CLS7i3k>

Appendices: First Draft of Instructional Materials

Appendix I. UDL Workshop Agenda

UDL Workshop Agenda		
List Agenda	Visual Agenda	Digital Agenda
Anticipation Guide		
UDL Video from Seattle Central Community College http://youtu.be/4FE1CLS7i3k		
“Your Three Brains” Tutorial		
Compare the UDL Guidelines to one of your lessons		
Revisit Anticipation Guide & Complete Post-Test		


Appendix II. [Anticipation Guide for UDL Workshop](#)

ANTICIPATION GUIDE <i>Please select the statements you agree with before the training and after the training</i>	BEFORE	AFTER
I am familiar with the term Universal Design for Learning (UDL).		
I understand Universal Design for Learning is based on brain research identifying the three brain networks: Recognition, Strategic, and Affective.		
Providing multiple means of representation aligns with the Recognition network of the brain.		
Providing multiple means of action and expression for learners aligns with the Strategic networks of the brain.		
Providing multiple means of engagement aligns with the Affective networks of the brain.		
One easy way to attend to the needs of multiple learners is to ensure that all videos are Close Captioned.		
Students with a wide variety of disabilities and needs are in every classroom in our district.		
UDL means being proactive and building supports in to lessons from the beginning, rather than being reactive and adjusting to student needs as barriers arise.		
Text-to-speech software can support students with the following barriers: physical access to textbooks, visual impairment, a learning disability, or even English language learners.		
Text-to-speech software is available on every computer at each campus in Northeast ISD to support all learners and not just those identified as having a disability.		

Appendix III. [UDL Video from Seattle Central Community College](#)**Appendix IV.** [UDL Video self-check quiz](#)

Appendix V. The [My Three Brains Tutorial](#) from CAST.org

Appendix VI. [Post-Test](#)

POST-TEST			
Question	Answer	Points Earned	Pts Possible
True or False: The goal of providing multiple means of engagement is to enhance student involvement.	<i>TRUE</i>		5
True or False: UDL has the potential to impact academic opportunities for a few students.	<i>FALSE</i>		5
True or False: UDL helps identify the one right way to teach a lesson because there is one type of “expert learner.”	<i>FALSE</i>		5
Modern digital imagery of the brain can help us develop better ways to _____.	<i>CREATE LESSONS</i>		5
Which brain network helps us identify this image as a table: Recognition, Strategy, or Affective? 	<i>RECOGNITION</i>		5
If the assignment is to read Cask of Amontillado, what is an example of integrating UDL into the lesson to support many learners?	<i>i.e., provide each- a paper copy/digital format/CC video</i>		5
The _____ network of the brain enable us to plan, execute, and monitor actions and skills. This is why we allow students multiple methods of action and expression in demonstrating what they know.	<i>STRATEGIC</i>		5
People diagnosed with ADHD may recognize speech but not understand it at times, because ADHD affects the _____ network of the brain.	<i>STRATEGIC</i>		5
The brain’s _____ network motivates us each day and helps us set priorities. This network is why we make	<i>AFFECTIVE</i>		5

the commitment to learn.			
True or False: One way of attending to the Affective network in a lesson is to design authentic and purposeful activities to spark learner interest.	<i>TRUE</i>		5
Research on the _____ supports developing lessons which can be appropriate for all levels and needs of students, from Gifted/Talented to Autistic.	<i>BRAIN</i>		5
It is essential to look at the true goal of a lesson. Determine the goal of this activity: “The learner will color each feather of a numbered pilgrim hat based on the coded answers to single-digit multiplication problems.”	<i>TLW KNOW SINGLE-DIGIT MULTIPLICATION</i>		10
In what way could traditional text present a barrier to learners?	<i>REQUIRES VISION, DECODING SKILLS</i>		10
In what way could video present a barrier to learners?	<i>REQUIRES SIGHT, BACKGROUND KNOWLEDGE OF THE MATERIAL AND CULTURE, ABILITY TO FOCUS ON STORYLINE AND MAKE MEANING FROM IT</i>		10
In what way could paper, pencil, crayons, or manipulatives present a barrier to learners?	<i>REQUIRE FINE MOTOR SKILLS, SPATIAL ORGANIZATIONAL SKILLS, AND SPATIAL AWARENESS</i>		10
True or False: UDL requires technology.	<i>FALSE</i>		5
<i>TOTAL</i>			<i>100</i>