

UNIVERSAL DESIGN FOR LEARNING

Putting Theory into
Practice One Step at a
Time

An illustration on a chalkboard background showing several lightbulbs hanging from above. One lightbulb in the foreground is lit up and glowing yellow, while the others are unlit and drawn in white chalk. A pink curved line highlights the lit lightbulb and the text area to its right.

Workshop Takeaways

1

One strategy to capture students' attention

2

One strategy to retain students' attention

Agenda

Introducing
yourself for
cross-
disciplinary
working
group
creation
(10')

Presenting
the current
post-covid
landscape
(5')

Defining
UDL
(5')

**First Principle:
Provide
multiple means
of Engagement**

- **Tip 1: Capture students' attention**(15')
- **Reflection**(10')
- **Tip 2 : Maintain students' attention**(15')

**Breakout
Rooms**
(30')

Q&A
(5')

Please introduce yourself

Using the chatroom,

**Please share
your name
and
department**

**Please share
with us what
you hope to
get from this
session
today.**



Post-Covid landscape : reduced students' engagement



More Americans questioning the value of a traditional college path (Return on Investment, Skill based more preferred).



Students requesting for more flexibility(absenteeism, late submissions, Hybrid or online vs in-person classes).



Students requesting more wellness support from faculty.



UDL promise is to bridge this gap.



Source: Cornell SC Johnson College of Business

Before we
start, defining:



Brain Network : connections between several neurons dedicated to execute a specific task.

Learning : formation of long-term memory(a network of neurons storing information) that can be retrieved when necessary.

UDL : What is?

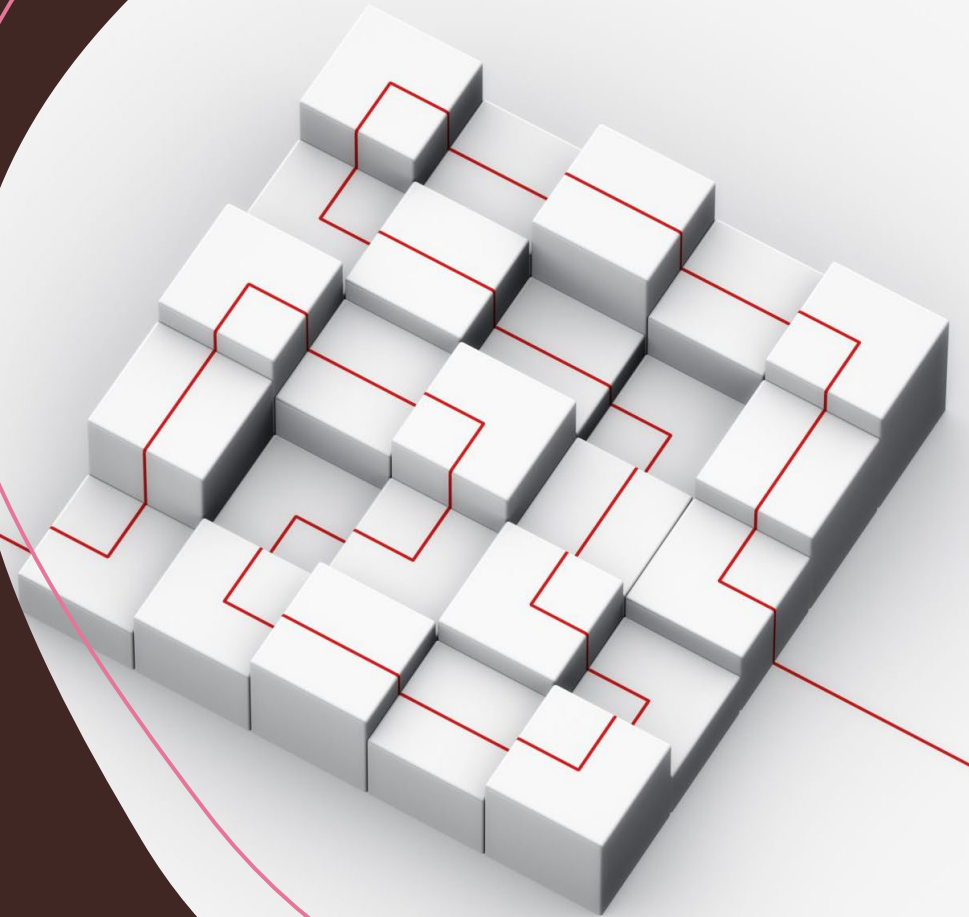
UDL is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn(Center for Applied Specialized Technology-CAST)

Derived from Universal Design in Architecture to ensure accessibility to everyone.

Brain variability: Experiences shape our brain networks and how we learn, thus the One size fits all approach leave students behind.

Universal Design for Learning uses neuroscience to bridge the gap.

UDL guidelines propose 3 principles.



UDL : 3 principles



Affective networks: THE WHY OF LEARNING



How learners get engaged and stay motivated. How they are challenged, excited, or interested. These are affective dimensions.



Stimulate interest and motivation for learning

Recognition networks: THE WHAT OF LEARNING



Strategic networks: THE HOW OF LEARNING



FIG. 4.5. The brain networks ©2013 CAST, INC.

UDL-Multiple ways of Engagement : How do you motivate your students to learn?

- Two goals for this network:

Help students relate to the course materials to Capture their attention/Interest

Use reachable challenges and promote students' self-control to Maintain Students Engagement and persistence.

AFFECTIVE NETWORKS: THE **WHY** OF LEARNING



Catching Students Attention/Interest (1/2)

- ❖ Attention is a limited resource (Oberauer, 2019; Medina, 2008)
- ❖ Students need to relate to the course

Explain course
relevance



Give to students the
possibility to create
their own learning
goals and peer-
checking regularly
their progress



Give to students the
possibility to choose
how they engage



Catching Students Attention/Interest (2/2)

❖ Minimize distractions and risks

Minimize distractions

e.g.:

- * Peer to Peer Reminders
- *Crowdsource note taking with a shared google doc.



Minimize risk of failure

e.g.:

- *Low stake Quizzes
- *Break down big project in Small components.



Practice what we preach(10 minutes)

Please take 10 minutes to do these activities on your own. Write down because you will be sharing about this in your Breakout Rooms.

Please write down two skills that your students will gain from your course and how they contribute to the career of your students. Can you find two job announcements on LinkedIn, Glassdoor or Indeed that is looking for those skills ? Save those links please, you can use them for the next class.

Please write down 2 to 3 ways of engagement you can offer in your course for the next class (For example: Group Discussion, Q&A time at the end of class, Online discussion board)

Please respond to this question on your personal note : Are you able for the next class to offer 15-30 minutes to your students for them to write down their course own learning objectives and pick a peer checker? If not, why?

Retaining Attention

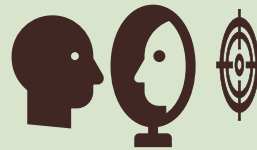
Persistence and growth

Teach students content with different and reachable levels of Challenge for persistence and growth.



Self Assessment and Reflection

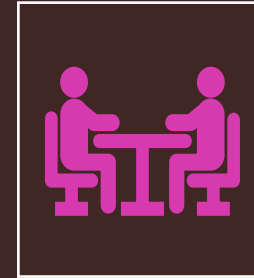
Help students reflect on the progress towards their own learning goals and your course learning outcomes.



Breakout Rooms(20 minutes)



Please discuss with your peers your responses to the prompt on how you are planning to catch students attention



Please discuss with your peers challenges that you would like to add to your next class and receive their feedback.

Suggested Readings

- Oberauer K. (2019). Working Memory and Attention - A Conceptual Analysis and Review. *Journal of cognition*, 2(1), 36. <https://doi.org/10.5334/joc.58>
- Medina, J. (2009). *Brain rules*. Pear Press.
- McGuire S. Y. & McGuire S. (2015). *Teach students how to learn : strategies you can incorporate into any course to improve student metacognition study skills and motivation (First)*. Stylus Publishing LLC.
- Persellin, D.C., & Daniels, M.B. (2019). *A Concise Guide to Teaching With Desirable Difficulties (1st ed.)*. Routledge. <https://doi.org/10.4324/9781003442721>
- CAST (2018). *Universal design for learning guidelines version 2.2 [graphic organizer]*. Wakefield, MA: Author.
- Flaherty, C. (2023, July 17). *Supporting Student Wellness: What's Enough and What's Too Much?*. Inside Higher Ed. https://www.insidehighered.com/news/student-success/health-wellness/2023/07/17/faculty-actions-help-promote-college-student-well?utm_source=I%E2%80%A6

Questions?

Thank you

