

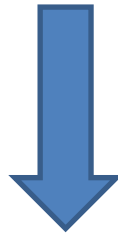
Universal Design for Learning Series

Learner Variability and UDL

Meet Katherine

- Educator in Oklahoma
- Works hard to meet learner needs

Narrow curriculum



Makes it hard to meet diverse learner needs

Exploring UDL

Katherine

- Explores Universal Design for Learning (UDL)
- Recognizes barriers in the curriculum
- Proactively plans for

Systematic Learner Variability

- Not just individual learner needs

Goal of this session

Explore systematic learner variability.

What is Learner Variability?

Illusory Average Student

- Many curricula focus on 'Average Student'
- Cognitive neuroscience has shown that **there is NO average student**

Systematic Learner Variability

- Learners are highly variability
- We can predict learner variability

Example of systematic variability:

- ❖ Learners vary based on age
- ❖ It's called **Developmental Variability**

Systematic Variability is Predictable

- Systematic variability occurs
 - At every age
 - In every learning environment
- Because systematic variability is predictable we can design for it!
- Curriculum can do more work!

Dimensions of Systematic Variability

Differences in how we:

- **represent** information
- **engage** with materials
- **act** upon materials and show what we know

Key Elements of UDL

- Design curriculum from the beginning to be universal
- Power to be very flexible
- Allows choices & different paths
- Represent information in different ways

Variability is Normal

We want learners to be the best kind of learners they can be.

Stop and Reflect

Stop the video and reflect on what has been discussed so far.

- What are the **big** ideas?
- Which of these ideas are **new** to you?
- How do these big ideas relate to **your practice**?

Why is Learner Variability Important?

The Danger

Without knowing about Learner Variability:

- Some will learn & some won't
- We mistakenly think we have been successful
- We won't know why we are successful with some learners & not with others

Address the Range

- We can more effectively support the individual by addressing the **range** of systematic learner variability **in advance**
- Rather than waiting to know each individual one-by-one
- There will always be a need for differentiating instruction

Game Changer

- We can design every learning environment in advance for predictable systematic learner variability
- Attend to learner variability once to free up time to attend to high valued areas of learning

Planning Ahead

- Coming in knowing that students will be highly variable allows educators to plan accordingly

Example:

- ❖ Going to Bermuda
- ❖ Plan ahead for weather variability by taking different options of clothing

Plan Proactively

- Look at learning episode or lesson and ask about what the barriers are going to be, for example:
 - How will this work for learners who don't take in information well?
 - How will it work for learners who are afraid to talk in front of others?

Example:

- ❖ Like '*packing your bag ahead*' for all sorts of weather

Stop and Prepare

Stop the video to either:

- Download the *Examples Template* from Resources section
- OR
- Prepare to take notes

Planning for Learner Variability

Meet Lisa

- Elementary educator in New York
- 25 years experience
- Describes how she meets learner variability in her classroom

Lisa's Strategies

- Technology Toolkit posted on the classroom website
- Toolkit includes websites introduced to class

Examples:

- ❖ Xtranormal video (<http://www.xtranormal.com/>)
- ❖ Animoto (video slideshow app)
(<http://animoto.com/intro/animoto/19b?gclid=CMCV6MmIhKwCFQJ-5Qod9iCXOQ>)
- ❖ Song edited in Audacity (<http://audacity.sourceforge.net/>)
- ❖ Newspaper
- ❖ Claymation video

Lisa's Strategies (continued)

- Introduce sites one at a time
- By November the class can use them independently

Examples:

- ❖ Make a Voki avatar (<http://www.voki.com/>)
- ❖ Create comic of science lesson (<http://www.makebeliefscomix.com/>)

Lisa's Strategies (continued)

- Individual or group projects allow learners to choose their
 - style of learning
 - style of demonstrating their knowledge

During whole class instruction, learners can use these options:

- ❖ Standing up, if needed
- ❖ Taking notes on laptops
- ❖ Highlighting notes with colored markers

Lisa's Summary Thoughts

“By allowing my students the freedom to be, I allow them to grow.”

Katherine Reflects on Learner Variability

- Integrating UDL into her curriculum
- Planning for all learners
- Leveraging technology to engage and support all learners

Katherine's Thoughts About UDL

- It can be overwhelming to implement UDL all at once so
- Just start with one thing
 - Find one lesson
 - Find one subject
 - Use one UDL Principle

Katherine's Strategies

- Use a variety of media
- Use a variety of formats with the group

Examples:

- ❖ Use SMART Board for different ways to understand information
- ❖ Use similar manipulatives at the table

Katherine's Strategies (continued)

- Present text & information in a variety of formats

Examples:

- ❖ e-text reader
- ❖ PowerPoint or Keynote

Katherine's Strategies (continued)

- Provide learners with multiple means of action and expression
 - Give choices
 - Give examples

Katherine's Strategies (continued)

- Teach learners how to use various formats

Examples:

- ❖ Use iPads to create paperless learning environment
- ❖ Use variety of apps to provide multitude of formats

Katherine's Summary Thoughts

“The more I engage them in technology, the more engaged they are in their learning.”

A Word About Technology

In order to apply the UDL framework, it is **not** necessary to have access to computers and technology.

Big Ideas Recap

- Many curricula are based on the ‘illusory’ average student – there is **no average learner**.
- Learner variability is **normal** and **systematic**.
- Because systematic learner variability is predictable, we can **proactively plan** for it.
- We can more effectively address individual learner needs by **planning for the range** of systematic learner variability.
- **Universal Design for Learning (UDL)** is a curriculum design framework that guides educators in planning for systematic learner variability.

Learn More

- Download materials from the **Additional Resources** section
- Explore more resources on the **National Center on UDL** (www.udlcenter.org)
- Learn from others by participating in the discussion forum on **UDL Connect** community entitled ***Learner Variability and UDL*** (www.community.udlcenter.org)