

Universal design for instruction: What works for UF students with learning disabilities.

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Cognitive Styles Common to LD/AD^{9,10}

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1. Big Picture Thinking
(Interconnected Reasoning)
2. Dynamic Reasoning
3. Narrative Reasoning
4. 3-Dimensional Spatial Reasoning

Big Picture Thinking (Interconnected Reasoning)

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- Ability to spot relationships
 - ▣ multiple points of view
 - ▣ borrows approaches from other disciplines



Dynamic Reasoning

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- Uses “best fit” cognitive processes



- Intuits solutions, then works backwards

Narrative Reasoning

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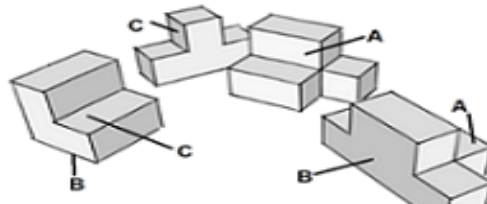
- Stories to recall, understand and imagine
- Boosts connections & memory



3-D Spatial Reasoning

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- Reasoning about:
 - ▣ Shape, size, motion, position
 - ▣ Orientation in space
 - ▣ Way objects in physical world interact
- Spatially gifted → verbally challenged



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UDL: Universal Design for Learning/Instruction

What is UDL?

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UDL Principles → Multiple Means of...

Representation

Various ways of
**learning the
information**
(e.g., hear & see)

The “**what**” of
learning

Expression/ Action

Alternative or various ways
of demonstrating they
know the content

The “**how**” of
learning

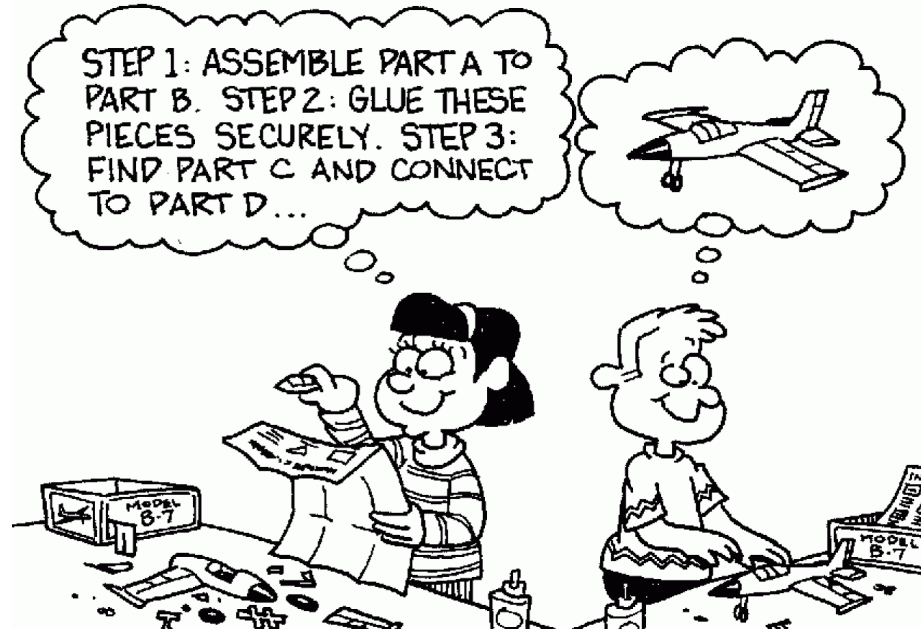
Engagement

Tapping into student's
interests & challenging
them in **motivating**
ways

The “**why**” of
learning

Multiple means of representation

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Multiple means of representation

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- “can you explain this in a different way?”
- “Recapping at the end of class...”
 - ▣ “...just a real quick recap”
- “..he just talks, I draw what he says.”
- “leave it on the board just a little bit longer”

Multiple means of expression

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"Please bear with me...It takes me longer to understand"

"Clear directions, in the right order...and all parts of the instructions in one place"

"...looking around when I took my tests and getting accused of cheating when I wasn't. I need a small testing environment..."

Multiple means of engagement

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“Positive support is a major motivation and will be that extra support we need to succeed.”

“I never procrastinate. I don't trust myself. I do it early.”

- ▣ Course calendar very important



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What Works for our Scholars

Examples of ways to implement Universal
Design

During Lectures

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- Highlight or write out:
 - ▣ Key terms
 - ▣ Key concepts
 - ▣ Key ideas
- Be explicit:
 - ▣ What they will learn.
 - ▣ Why learn it.
 - ▣ What to do with new learning.

During Lectures

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- Model reasoning & judgment
- Leave things on the board just a little longer
- Visual aids, concept maps, graphs, charts
- Give the big picture first
 - End with connecting to the big picture

General Classroom

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- Provide slides/notes ahead
- Clarify instructions & give additional examples
- Relate a new topic to one already learned or a real-life example

General Classroom

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- Comprehensive chronological outline
- Explain how to study for the kind of tests you give.
- Sample test questions & answers



Don't be scary...

**"Kindness is the language
which the deaf can hear
and the blind can see."**

Mark Twain

- Rushed gets mistaken for unapproachable
- Expectations for getting to the point → "shuts me down"

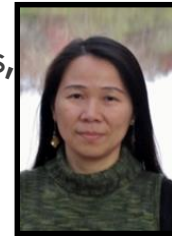
It takes a village...

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More of our CS3LD team:

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- CY Wu, PhD, Environmental Engineering Sciences
- Mei-Fang Lan, PhD, Counseling & Wellness Center
- Charles Byrd, PhD, Center for Assessment, Strategic Planning, Evaluation and Research
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Acknowledgements

- HRD 1246587 National Science Foundation. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.
- K12 HD055929 National Institutes of Health – National Center for Medical and Rehabilitation Research (NICHD) and National Institute for Neurological Disorders & Stroke. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.
- NIH/NCATS Clinical and Translational Science Award to the University of Florida UL1TR000064 – REDCap

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