Universal Design for Learning:
A framework for good teaching, a model for student success

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Universal Design for Learning

Universal Design for Learning (UDL)
is a set of principles and techniques for
teaching, creating inclusive classroom instruction,
technology, and accessible course materials.

Universal Design (UD)

- Build in accessibility from the start
  - Curb cuts in city streets
  - Ramps and automatic door openers
  - TV closed captions
  - Ergonomic kitchen utensils
- Everyone benefits from a more flexible, user-friendly environment
Universal Design for Learning (UDL)

- Inclusive pedagogy
- UDL applies to both teaching and technology

Who are college students today?

- Ethnicity & Culture
- Gender
- Nontraditional
- ESL/Native language
- Learning/Cognitive Styles
- Disabilities

They are diverse
VARK (Fleming, 1992 and 2006)

1. Visual
2. Aural/Auditory
3. Reading/Writing (multiple preferences)
4. Kinesthetic


Disabilities

- Mobility Impairments
- Blindness/Visual Impairments
- Deafness/Hearing Impairments
- Learning Disabilities
- Attention Deficit Disorder (ADD/ADHD)
- Autism Spectrum Disorder
- Traumatic Brain Injury (TBI)
- Post Traumatic Stress Disorder (PTSD)
- Mental Illness
Disabilities in Higher Education

- Nationally, 11.3% of undergraduates report some type of disability\(^1\)
- At Colorado State University\(^2\)
  - 9%–11% report a disability
  - Non-apparent disabilities are by far the largest proportion and growing
  - Even among students who say they have a disability, few seek accommodations

\(^1\)National Center for Education Statistics, 2008; U.S. Government Accountability Office, 2009
\(^2\)Schrock, Eileen & Sporsen, Journal of Postsecondary Education and Disability, Pre 2011
Universal Design for Learning: 3 Principles

1. Instructors represent information and concepts in multiple ways (and in a variety of formats).
2. Students are given multiple ways to express their comprehension and mastery of a topic.
3. Students engage with new ideas and information in multiple ways.

Representation

Alternative Representations*

- Lecture: Its strengths and weaknesses
- Video/Audio podcasts
- Shared note taking

A Tale of Two Documents: The Technical Side of UDL

What makes a document Universally Designed?
- Searchability
- Copy and Paste
- Bookmarks or an Interactive Table of Contents
- Text to Speech capability
- Accessibility
  - Keyboard access, alternative to images, etc.

UDL Tech Tutorials
- Microsoft Word
  - Styles and Headings
  - Images
- PowerPoint
- Adobe PDF
- Video Captioning (new)
- HTML
- E-Text

http://accessproject.colostate.edu
CSU Psychology Undergraduates: What helps you learn?

- It helps me learn when the instructor...
- presents information in multiple formats
- actively engages students in learning
- relates key concepts to the larger objectives of the course
- begins class with an outline
- summarizes key points
- highlights key points of instructional videos
CSU Psychology Undergraduates: What engages you?

- Strategies that increase engagement
  - Clicker questions
  - Ask questions
  - Videos
  - Partner/group discussion and activities
  - In-class mini writing assignments

Points of Discussion
1. What percentage of essential information provided during class is presented in multiple formats, including text, graphics, audio, video, and/or physical movement?

- 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% N/A
- 1 1 2 1
Points of Discussion

2. In what percentage of each class session, on an average, do you actively engage students in learning?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% N/A
1 1 1 1 1

Points of Discussion

4. In what percentage of class sessions do you relate key concepts to the larger objectives of the course?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% N/A
1 1 2

Points of Discussion

6. In what percentage of lectures do you begin with an outline of what will be covered?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% N/A
1 1 1 1
7. In what percentage of lectures do you summarize key points, either during or at the end of lecture?

- 0%  1  1
- 10%  1
- 20%  1
- 30%  1
- 40%  1
- 50%  1
- 60%  1
- 70%  1
- 80%  1
- 90%  1
- 100%  1
- N/A  1

13. If videos are used in your courses, what percentage is captioned?

- 0%  2  1
- 10%  2
- 20%  1
- 30%  1
- 40%  1
- 50%  1
- 60%  1
- 70%  1
- 80%  1
- 90%  1
- 100%  1
- N/A  1

16. For what percentage of course content delivered outside of class are instructional technologies employed? (For example, RamCT, videos, podcasts, online materials, external websites, etc.)

- 0%  1
- 10%  3
- 20%  1
- 30%  1
- 40%  1
- 50%  1
- 60%  1
- 70%  1
- 80%  1
- 90%  1
- 100%  1
- N/A  1
Points of Discussion

18. What percentage of materials for your courses (other than the textbook) is accessible, clearly organized, and easy for students to use?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% N/A

1 1 2 1

Points of Discussion

24. In what percentage of each class sessions, on an average, do you feel that students are engaged and motivated to learn?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% N/A

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References


Thank you!

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