Universal Design for Learning:

A framework for good teaching, a model for student success

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BIG Question #1

Who are your students?

Student Diversity

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

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>CSU Students</th>
<th>CSU Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority</td>
<td>13.6%</td>
<td>22.8%</td>
</tr>
<tr>
<td>International</td>
<td>3.5%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

Potential barriers to comprehension
- For both students and instructors
- Affects written and verbal communication

Language Quiz 1

What is your good name, sir?
A. Full name
B. Last name
C. Nickname or pet name
I say there are 100 Crore stars in the sky. You say the stars number 10,000 Lakh. Do we agree?

- 1 lakh = 100,000
- 1 crore = 10,000,000

Nontraditional Students

- Highly motivated & Achievement oriented
  - Finances and family are two of the biggest concerns
  - Strong consumer orientation
  - Need flexible schedules
- Integrate learning with life and work experiences
- Prefer more active approaches to learning
- Relatively independent
  - Lack of a cohort, "student life" experience
Learning Styles

1. Visual
   a) Visual-Linguistic (reading and writing)
   b) Visual-Spatial (graphs and pictures)
2. Auditory (listening)
3. Kinesthetic (touching and moving)

Disabilities
- Both short-term and long-term, apparent and non-apparent
- Mobility Impairments
- Blindness/Visual Impairments
- Deafness/Hearing Impairments
- Learning Disabilities
- Attention Deficit Disorder (ADD/ADHD)
- Autism Spectrum Disabilities
- Traumatic Brain Injury (TBI)
- Post Traumatic Stress Disorder (PTSD)
Disabilities

- National statistics*
  - 11.3% of undergraduates report some type of disability

- Colorado State University**
  - 8%–11% (ACCESS research, 2007-10)
  - Non-apparent disabilities are by far the largest proportion and growing
  - Even among students who say they have a disability, few seek accommodations

**Schreier, S. & Sprenger, Journal of Postsecondary Education and Disability, in press

BIG Question #2

- Who are your students?
- How do you reach and engage diverse students?

Universal Design for Learning

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

“"
History of UDL

- Universal Design (UD)
  - Accommodate the widest spectrum of users without the need for subsequent adaptation
  - Access to public buildings, city streets, television...

- Universal Design for Learning (UDL)
  - Inclusive pedagogy
  - Applies to both teaching and technology

UDL's 3 Principles

1. **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**
#1: Representation

- Presenting ideas and information in multiple ways and in a variety of formats
  - Lectures
  - Group activities
  - Hands-on exercises
  - Text + Graphics, Audio, Video
  - Usable electronic formats (e.g., Word, PDF, HTML)

What makes a document Universally Designed?

- Searchability
- Copy and Paste
- Bookmarks or an Interactive TOC
- Text to Speech capability
- Accessibility

A Tale of Two PDF Documents

Scanned vs. OCR and Tags
# Expression

Students expressing their comprehension in multiple ways

- “Three P’s”: Projects, Performances, Presentations
- Mini-writing assignments
- Portfolios/Journals/Essays
- Multimedia (text/graphics/audio/video)

[http://accessproject.colostate.edu](http://accessproject.colostate.edu)
#3: Engagement

- Engaging students in multiple ways
  - Express your own enthusiasm!
  - Challenge students with meaningful, real-world assignments (e.g., service learning)
  - Give prompt and instructive feedback
  - Use classroom response systems (i-clickers)
  - Make yourself available to students during office hours in flexible formats

CSU Psychology Undergraduates: What helps you learn?

- Information presented in multiple formats
- Instructor actively engages students in learning
- Instructor relates key concepts to the larger objectives of the course
- Instructor begins class with an outline
- Instructor summarizes key points
- Instructor highlights key points of instructional videos
CSU Psychology Undergraduates: What engages you?

- Strategies that increase engagement
  - b>clicker questions
  - Asks questions
  - Videos
  - Partner/group discussion and activities
  - In-class mini writing assignments

The UDL Framework

Engage

Express

Represent

BIG Question #3

Who are your students?
How do you reach and engage diverse students?
What are CSU's Goals?
Goals of the University

- Access, Diversity, and Internationalization
- Accessibility for students with physical, learning and other disabilities
- Active and Experiential Learning Opportunities
- Student Engagement Outcomes
- Learning Outcomes (e.g., critical thinking)
- Retention and Graduation

The ACCESS Project

- Funded by U.S. Dept. of Education, Office of Postsecondary Education
  - Grant #P333A080026
- Our Goal:
  - Ensuring that students with disabilities receive a quality higher education
- Our Method:
  - Universal Design for Learning (UDL)
  - Student Self-Advocacy

Published UDL Resources


Thank you!

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