Universal Design for Learning:

A framework for good teaching, a model for student success

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Objectives

- What is UDL?
- Who benefits from it?
- How can it be implemented?

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>CSU Students</th>
<th>CSU Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority</td>
<td>13.6%</td>
</tr>
<tr>
<td>International</td>
<td>3.5%</td>
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</tbody>
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*CSU Facts at a Glance, 2009-2010

ESL / Native Language

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

What is your good name, sir?

A. Full name
B. Last name
C. Nickname or pet name

I say there are 100 Kroe stars in the sky. You say the stars number 10,000 Lakh.

Do we agree?

Nontraditional Students

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
  - Want applicability to the real world
  - Prefer more active approaches to learning
- Relatively independent
  - Lack of a cohort, "student life" experience

Men & Women*

Learning Styles

1. Visual
   - Visual-Linguistic (reading and writing)
   - Visual-Spatial (graphs and pictures)
2. Auditory (listening)
3. Kinesthetic (touching and moving)
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)
- Autistic 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
- Only a small percentage seeks accommodations


Universal Design for Learning

Universal Design for Learning is a set of principles and techniques for teaching, 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
  - Public buildings, city streets, television, kitchen utensils...
- Universal Design for Learning (UDL)
  - Inclusive pedagogy
  - Applies to both teaching and technology

UDL and Teaching

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
**Representation**

- Ideas and information are represented 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)

**UDL and Technology**

- Educational Videos
- Course Materials
- Lecture Presentation Systems
- Course Management Systems

**What makes a document Universally Designed?**

- Searchability
- Copy and Paste
- Bookmarks or an Interactive TOC
- Text to Speech capability
- Accessibility
Students express comprehension and mastery in multiple ways:
- Oral presentation
- Written essays
- Projects/Portfolios/Journals
- Performance
- Multimedia (text/graphics/audio/video)
Expression

- Colin from our video
  - Student with Quadriplegia
  - Undergraduate in Landscape Architecture
- Assignment: Create a 3D model
  - Physical model
  - Computerized model

Engagement

Help students “engage” in multiple ways
- Express your own enthusiasm!
- Challenge students with meaningful, real-world assignments
- Give prompt and instructive feedback on assignments
- Classroom response systems (clickers)
- Make yourself available to students during office hours in flexible formats
Professor from India has students video tape Q&A during office hours

Individual questions answered for everyone in the course
- Video
- Written explanation

What’s so special about UDL?

UDL Framework
- Engage
- Express
- Represent
BIG Question #2

Who are your students?

What are our institution's goals?

CSU’s Strategic Goals

- **Goal 5**: Access, Diversity, and Internationalization
- **Goal 6**: Undergraduate Curriculum and Advising
  - 6.2: Enhance programmatic accessibility for students with physical, learning and other disabilities
- **Goal 7**: Active and Experiential Learning Opportunities
- **Goal 10**: Student Engagement Outcomes (curricular and co-curricular)

CSU’s Strategic Goals

- **Goal 9**: Learning Outcomes
  - critical thinking
  - writing
- **Goal 8**: Retention and Graduation
  - CSU’s first-year retention rate: 82%
  - 6-year graduate rate: 63%
**BIG Question #3**

Who are your students?  
What are CSU’s Goals?  
What’s your Instructional Philosophy?

**Instructional Philosophy**

- How do you conceptualize knowledge?  
  - What is your role in the transmission of knowledge?  
  - What constitutes student learning?  
  - What learning objectives have you set for them, and how do you know when they’ve been achieved?

**Recommended Video**

http://www.cornell.edu/video/?VideoID=225
Published Resources


Thank you!

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