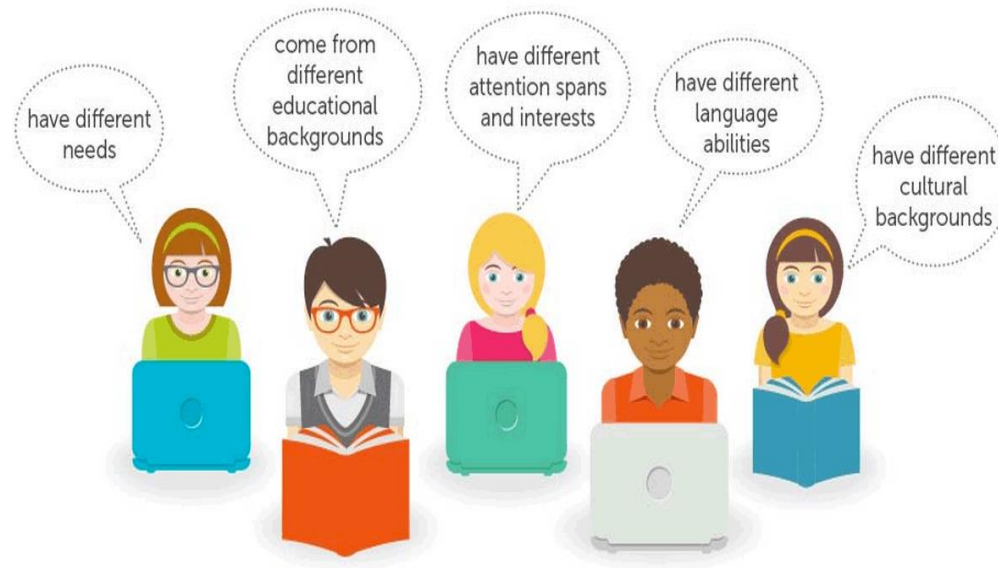


Addressing Diversity through Universal Design for Learning

Dr. Brian Butler

WHY UNIVERSAL DESIGN FOR LEARNING?

Classrooms are filled with students who:



What is Universal Design?

- Universal Design is design for all.
- School of Design North Carolina State University
www.design.ncsu.edu/cud/

Universal Design Definition

- "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.
- Ron Mace 1988





Custom Mirror Heights

Angled Mirror Installation

Widen Doorways to 36"

Grab Bar Blocking behind Walls for Future Needs

Custom Closet Configurations

Comfort Height Toilets

Grab Bars by Toilets, Bath Tubs, and Showers

Custom Seating Areas

Roll-under Sinks

Roll-in Shower Pans

Adjusted Counter Heights



E - Desk



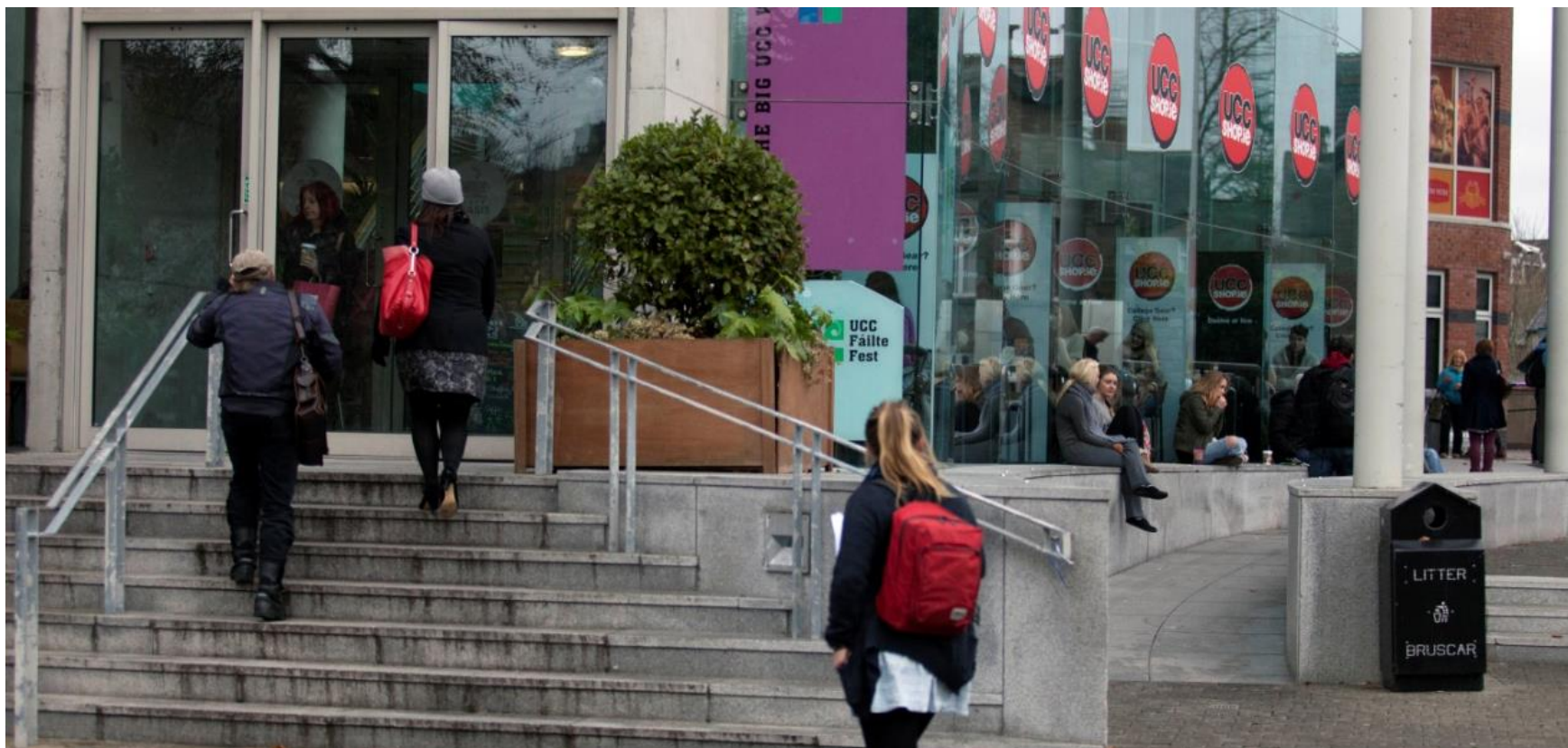
UCC

The Entrance to the President's Office



UCC

Entrance from the Quadrangle to the Stone Corridor and the Visitors' Centre



Aras na MacLeinn

Universal Design at UCC

CAST and the Work of Anne Meyer and David Rose

- Centre for Applied Special Technology (CAST) have drawn up 3 principles of Universal Design for Learning and these reflect the basic neurology of the learning brain
- www.cast.org

Brain Networks

3 primary brain networks come into play:

- Recognition networks.
- Strategic networks.
- Affective networks.

Universal Design for Learning

Recognition Networks

The "what" of learning



How we gather facts and categorize what we see, hear, and read. Identifying letters, words, or an author's style are recognition tasks.



Present information and content in different ways



Principle #1:
Provide Multiple Means of Representation

Strategic Networks

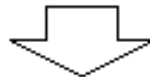
The "how" of learning



Planning and performing tasks. How we organize and express our ideas. Writing an essay or solving a math problem are strategic tasks.



Differentiate the ways that students can express what they know



Principle #2:
Provide Multiple Means of Action and Expression

Affective Networks

The "why" of learning



How learners get engaged and stay motivated. How they are challenged, excited, or interested. These are affective dimensions.



Stimulate interest and motivation for learning



Principle #3:
Provide Multiple Means of Engagement

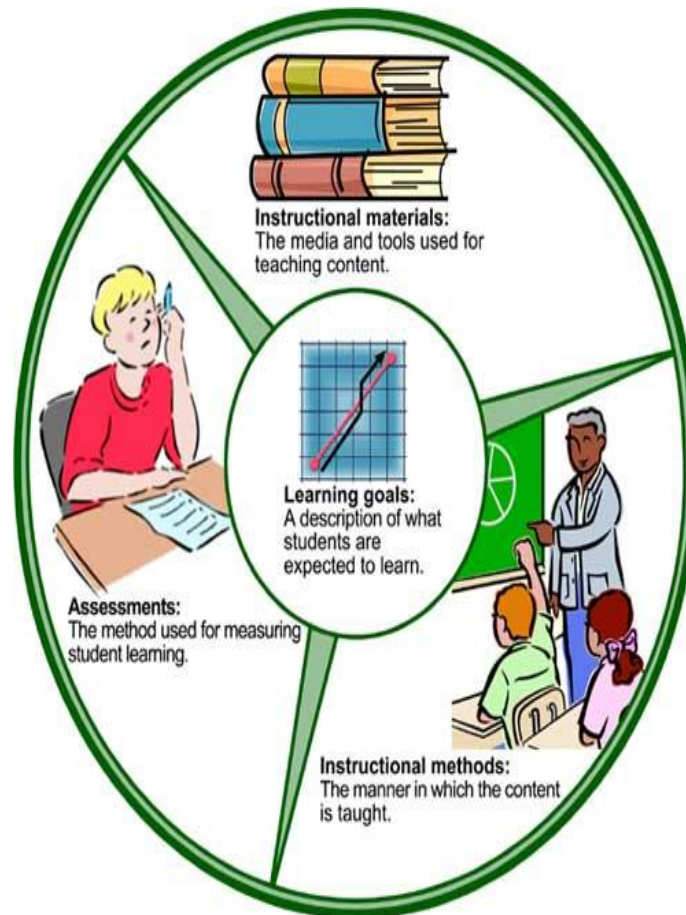
Universal Design for Learning

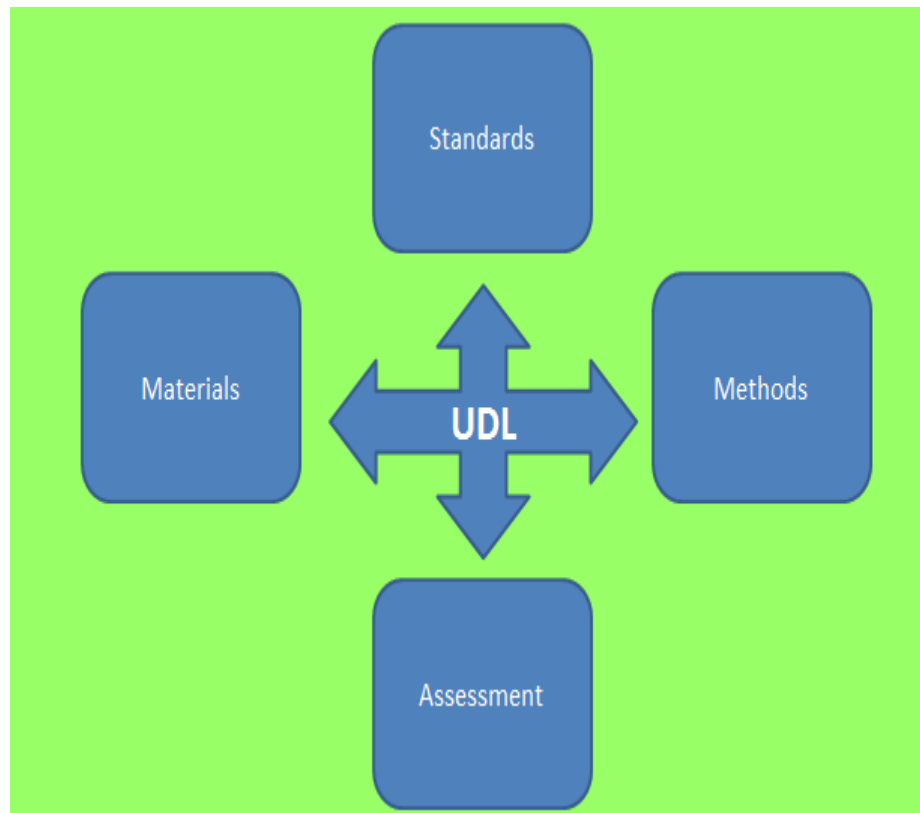
Multiple Means of Representation

Multiple Means of Expression



Multiple Means of Engagement





Multiple forms of Representation

- Provide options for:
- perception.
- language, mathematical expressions and symbols.
- comprehension.

Multiple forms of Expression

- Provide options For:
- physical action.
- expression and communication.
- executive functions.

Multiple forms of Engagement

- Provide options for:
- 7. recruiting interest
- 8. sustaining effort and consistence.
- 9. self regulation.

IMPORTANCE OF TECHNOLOGY TO UDL

Course web site can be vital for providing variety in instruction and materials:

- Syllabus of course or program of study
- Assignments
- Discussion groups
- Class projects
- Class notes

IMPORTANCE OF TECHNOLOGY TO UDL

- Video material
- Podcasts
- PowerPoint slides for lectures
- Reading material
- Links to other websites can also help provide additional representations of a topic

- <http://udlguidelines.cast.org/#mainContent>

Useful Web Addresses

- The Association for Higher Education, Access and Disability (AHEAD) <http://www.ahead.ie>
- Centre for Applied Special Technology (CAST)
<http://www.cast.org>
- National Center for Universal Design for Learning
<http://www.udlcenter.org>

Center for Excellence in Universal Design www.universaldesign.ie

World wide web consortium www.w3.org