

Universal Design for Learning (UDL): Applying Universal Design Concepts to Postsecondary Teaching

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Background and History of Universal Design (UD) Principles

1950s: Began to be considered in Europe, Japan, and the United States.

1970s: Evolved from removing physical barriers to people with disabilities to integration of all people within all environments. Coincided with passage of civil rights for individuals with disabilities, including the Architectural Barriers Act of 1968, the Rehabilitation Act of 1973, and the Education of the Handicapped Act of 1975.

Ron Mace (1941-1998): Founder, Center for Universal Design in North Carolina and an architect with a disability, defined, and popularized UD. Mace wrote UD is a "commonsense approach to making everything we design and produce usable by everyone to the greatest extent possible" (Institute for Human Centered Design, 2008). The Center for Universal Design published seven principles applicable to environmental accessibility (Connell et al., 1997).

Seven UD Principles

- 1. Equitable use
- 2. Flexibility in use
- 3. Simple and intuitive use
- 4. Perceptible information
- 5. Tolerance for error
- 6. Low physical effort
- 7. Size and space in approach and use

Universal Design for Learning (UDL)

UDL applies the seven UD Principles to education and adds two principles: Principle 8: A community of learners and Principle 9: Instructional climate. UDL focuses on simple, intuitive methods to enhance classroom and distance education teaching. Staff from the Center on Disability Studies (CDS) at the University of Hawai'i have been conducting researching and providing training on aspects of UDL for several years. Research is being conducted on three specific techniques: 1) Pause Procedure, 2) Guided Notes, and 3) Graphic Organizers.

Pause Procedure

- Short (e.g., 2-minute), periodic breaks to review notes and discuss content
- Pause at natural breaks, app. every 15 minutes
- Set timer for end of break
- Pauses can be independent review of notes and/or short writing assignment
- Group discussion of notes
- Include time for unresolved questions
- Provides students and instructor with breaks

Even the best students have limited attention spans

Graphic Organizers (GOs)

- A visual and graphic display depicting relationships in course content. Advanced organizers, Venn diagrams, concept/spider/story maps, flowcharts, hierarchies
- Not one-dimensional outlines
- Can provide completed GOs to students
- Learn by viewing
- Students can construct own GOs
- Learn by doing
- Students can finalize partially completed GOs

Guided Notes

- Handouts that guide students through a lecture
- Identify the most important course content
- Less can be more
- Delete key facts, concepts, and relationships from lecture outline
- Remaining information structures and contextualizes notes
- Insert cues (*, ⇒) to indicate where and how many facts/concepts to write
- Other symbols for adding own examples/questions for review (!) or emphasizing "big ideas" (4)
- Leave plenty of space
- Don't require too much writing
- Include additional resources such as URLs and references