

## Equal Access: Universal Design of Instruction

### A checklist for inclusive teaching

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Founder and director of DO-IT (2008-2015)

<http://www.washington.edu/doi/>

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### A checklist for inclusive teaching

#### Definition

Universal Design of Instruction (UDI):  
instruction design for potential students who  
have broad ranges with respect to ability,  
disability, age, reading level, learning style, native  
language, race, and ethnicity.

## UDI Goal

To maximize the learning of students with a wide range of characteristics by applying UD principles to all aspects of instruction:

- Class climate
- Interaction
- Physical environments and products,
- Delivery methods
- Information resources and technology
- Feedback
- Assessment

## UDI Process

“UD is a goal that puts high values on diversity, equality, and inclusiveness. It is also a process.”(DO-IT website)

Instructors ***should first consider*** the “potential variation in individual ***skills, learning styles and preferences, age, gender, sexual orientation, culture, abilities*** and ***disabilities*** as they select appropriate content and strategies for delivery of instruction and then apply universal design to all course activities and resources”.

## UDI Process

### STEPS

- 1) Identify the course (objectives, content)
- 2) Define the universe. Describe the student population...
- 3) Involve students
- 4) Adopt instructional strategies
- 5) Apply instructional strategies
- 6) Plan for accommodations
- 7) Evaluate

## Step 1: Identify the course and 2: Define the universe

Define **course learning objectives** and overall **content** as well as the **student population**. Consider this population's potential diverse characteristics with respect to:

- Age
- Gender
- Ethnicity
- Race
- Native language
- Learning style
- Abilities to see, hear, manipulate, read and communicate

### Step 3: Involve students

Consider perspectives of students identified in Step 2 in course development.

### Step 4: Adopt instructional strategies

*In order to ensure full inclusion of all students:*

- Create instructional strategies and
- Integrate them with UD

### Step 5: Apply instructional strategies

In order to maximize the learning of students with the wide variety of characteristics (**see step 2**)

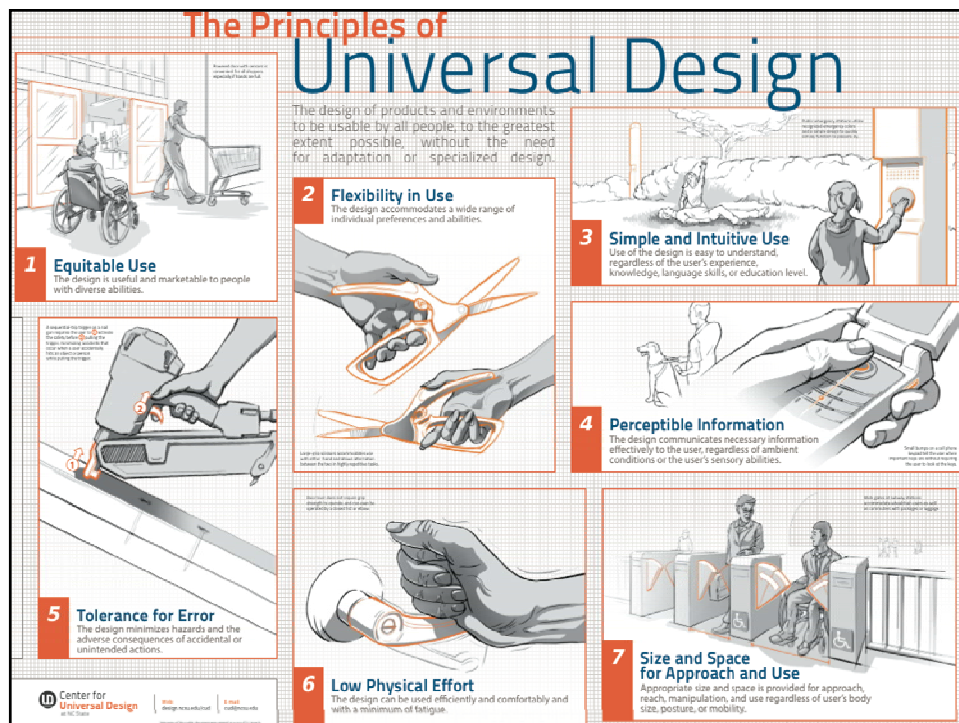
A. Apply (UD integrated) instructional strategies to:	B. Apply UD to all:
Choice of teaching methods	Lectures
Curricula	Class discussions
Assessments	Group work
	Handouts
	Web based content
	Labs
	Fieldwork
	Assessment instruments
	Other academic activities and materials

## Step 6: Plan for accommodations

Learn school procedures for addressing accommodation requests. ***Include the information in the syllabus.***

## Step 7: Evaluate

- Monitor the effectiveness of instruction through observation and feedback from students with the diverse set of characteristics identified in Step 2,
- assess learning, and
- modify the course as appropriate.

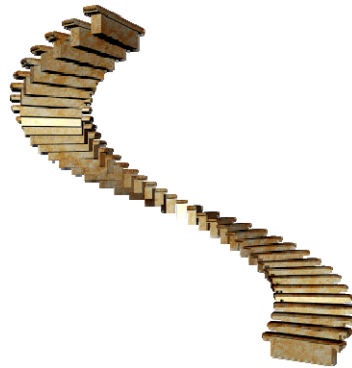


## UDL Principle

To promote the development of curriculum that includes:

- 1) Multiple means of representation
- 2) Multiple means of action and expression, and
- 3) Multiple means of engagement

UDI embraces both UD and UDL principles to all aspects of instruction.



## UDI Practices. A checklist

### CLASS CLIMATE

*Adopt practices that reflect high values with respect to both diversity, equity and inclusiveness.*

- Create a welcoming and inclusive environment for all students
- Avoid stereotyping
- Be approachable and available
- Motivate all students
- Address individual needs in an inclusive manner
- Avoid segregating or stigmatizing any student

## UDI Practices. A checklist

### INTERACTION

*Encourage regular and effective interactions between students and with the instructor, use multiple communication methods, and make them accessible to all participants.*

#### Promote effective communication:

- a. Face the class
- b. Speak clearly
- c. Make eye contact
- d. Offer in-person contact and online communication
- e. Use straightforward language and avoid unnecessary jargon and complexity

#### Make interactions accessible to all participants.

- a. Make expectations verbal and in printed format for discussions, presentations and small groups.

## UDI Practices. A checklist

### INTERACTION (contd.)

*Encourage regular and effective interactions between students and with the instructor, use multiple communication methods, and make them accessible to all participants.*

#### Encourage inclusive cooperative learning:

- a. Assign group work which engages a variety of skills and roles.
- b. Encourage different means of interaction
  - in-class discussions
  - group work,
  - internet based communications

#### Insist on and facilitate all students' participation.

## UDI Practices. A checklist

### PHYSICAL ENVIRONMENTS AND PRODUCTS

*Ensure that all facilities, activities, materials, and equipment are physically accessible to and usable by all students*

▪ Ensure physical access to facilities

▪ Arrange instructional spaces to maximize inclusion and comfort

*(accessible seating, minimal distractions, encourage administration to apply UD principles in facility design and renovation)*

▪ Ensure that everyone can use equipment and materials.

▪ Ensure safety



## UDI Practices. A checklist

### DELIVERY METHODS

*Use multiple instructional methods that are accessible to all learners.*

#### Select flexible curriculum

- A. choose UD-inspired textbooks
- B. use well-organized and structured curriculum materials which:
  - emphasize important points and provide:
    - a. references for background knowledge
    - b. indices and glossaries
    - c. chapter outlines
    - d. study questions
    - e. practice exercises
- C. Consider technology-based materials that provide *feedback, background information, vocabulary and other supports* (based on student responses)

## UDI Practices. A checklist

### DELIVERY METHODS (contd.)

*Use multiple instructional methods that are accessible to all learners.*

#### Make content relevant

- Put learning in context
- Incorporate multiple examples and perspectives to make concepts relevant to individuals with diverse characteristics (see step 2)

## UDI Practices. A checklist

### DELIVERY METHODS (contd.)

*Use multiple instructional methods that are accessible to all learners.*

#### Provide cognitive supports

- a. Summarize major points
- b. Give background and contextual information
- c. Write key terms/concepts on the board and in handouts
- d. Deliver effective prompting
- e. Provide scaffolding tools in print and electronic format:
  - Outlines
  - Class notes
  - Summaries
  - Copies of projected material
- f. Provide options for gaining background information, vocabulary, and practice
- g. Consider projecting 1-2 questions to be answered by end of class.

## UDI Practices. A checklist

### DELIVERY METHODS (contd.)

*Use multiple instructional methods that are accessible to all learners.*

#### Provide multiple ways to gain knowledge

*Use multiple modes to deliver content and, when possible, allow students to choose from multiple options for learning content.*

#### Consider:

- Lectures
- Collaborative learning
- Small group discussions
- Hands-on activities
- Internet based resources
- Educational software and fieldwork

## UDI Practices. A checklist

### DELIVERY METHODS (contd.)

*Use multiple instructional methods that are accessible to all learners.*

#### Clearly deliver instructions in multiple ways

- ❖ Provide instructions orally and in printed form
- ❖ Have students summarize instructions to ensure understanding

## UDI Practices. A checklist

### DELIVERY METHODS (contd.)

*Use multiple instructional methods that are accessible to all learners.*

#### Use large visual and tactile aids

To demonstrate content use:

- a. Large, bold fonts
- b. Uncluttered displayed documents
- c. A computer to enlarge microscopic images

## UDI Practices. A checklist

### INFORMATION RESOURCES AND TECHNOLOGY

*Ensure that course materials, notes, and other information resources are engaging, flexible, and accessible to all students.*

Select and provide materials early

Provide materials in accessible formats

- Select/create materials that are universally designed
- Use textbooks with accessible formats and flexible features
- Provide syllabus and other materials in electronic format
- Use captioned videos and provide transcriptions for audio presentations
- Apply accessibility standards to websites.

## UDI Practices. A checklist

### INFORMATION RESOURCES AND TECHNOLOGY

*Ensure that course materials, notes, and other information resources are engaging, flexible, and accessible to all students.*

Accommodate a variety of reading levels and language skills, when appropriate, given the goals of the course

- Present content in logical and straightforward manner
- Avoid unnecessary jargon and complexity and define new terms
- Create materials in simple and intuitive formats.

Ensure the availability of appropriate assistive technology

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## UDI Practices. A checklist

### FEEDBACK AND ASSESSMENT

*Regularly assess student's progress and provide specific feedback on a regular basis using multiple accessible methods and tools, and adjust instruction accordingly.*

#### Monitor and adjust

- Regularly assess background knowledge and current learning informally (*class discussions*) and formally (*frequent short exams*)
- Adjust content and methods accordingly

#### Provide sample test questions and study guides

- provide answers
- discuss how to study for exams or
- provide study guides

#### Test in the same manner in which you teach

#### Minimize time constraints when appropriate

- Announce assignments well in advance of due dates
- Allow extended time on tests and projects (*unless speed is a learning outcome*)

## UDI Practices. A checklist

### ACCOMMODATION

*Plan for accommodations for students whose needs are not fully met by the instructional design.*

- ❖ Know protocols to arrange for accommodations
- ❖ Share accommodation information in course syllabus
- ❖ Communicate effectively with teaching and lab assistants about student accommodations.