Universal Design Principles Explained

PRINCIPLE ONE: Equitable Use - The design is useful and marketable to people with diverse abilities.

Guidelines:
• Provide the same means of use for all users: identical whenever possible; equivalent when not.
• Avoid segregating or stigmatizing any users.
• Provisions for privacy, security, and safety should be equally available to all users.
• Make the design appealing to all users.

PRINCIPLE TWO: Flexibility in Use - The design accommodates a wide range of individual preferences and abilities.

Guidelines:
• Provide choice in methods of use.
• Accommodate right- or left-handed access and use.
• Facilitate the user's accuracy and precision.
• Provide adaptability to the user's pace.

PRINCIPLE THREE: Simple and Intuitive - Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Guidelines:
• Eliminate unnecessary complexity.
• Be consistent with user expectations and intuition.
• Accommodate a wide range of literacy and language skills.
• Arrange information consistent with its importance.
• Provide effective prompting and feedback during and after task completion.

PRINCIPLE FOUR: Perceptible Information - The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Guidelines:
• Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
• Provide adequate contrast between essential information and its surroundings.
• Maximize "legibility" of essential information.
• Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
• Provide compatibility with a variety of techniques or devices used by people with sensory limitations.
PRINCIPLE FIVE: Tolerance for Error - The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Guidelines:

• Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
• Provide warnings of hazards and errors.
• Provide fail safe features.
• Discourage unconscious action in tasks that require vigilance.

PRINCIPLE SIX: Low Physical Effort - The design can be used efficiently and comfortably and with a minimum of fatigue.

Guidelines:

• Allow user to maintain a neutral body position.
• Use reasonable operating forces.
• Minimize repetitive actions.
• Minimize sustained physical effort.

PRINCIPLE SEVEN: Size and Space for Approach and Use - Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Guidelines:

• Provide a clear line of sight to important elements for any seated or standing user.
• Make reach to all components comfortable for any seated or standing user.
• Accommodate variations in hand and grip size.
• Provide adequate space for the use of assistive devices or personal assistance.