Creating Multi-Intelligent User Experiences through Digital Media

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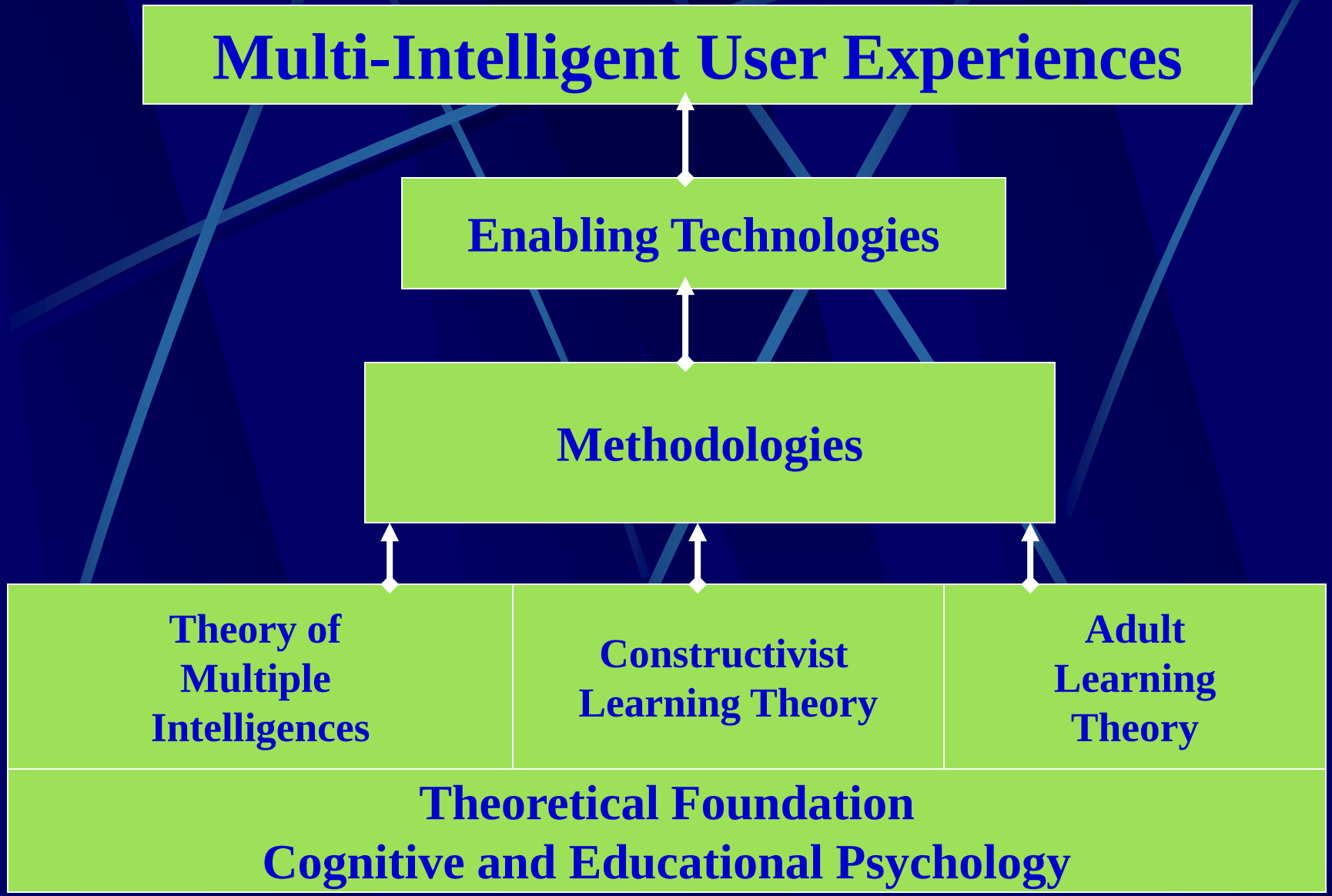
Understanding Goals

By the end of the workshop, participants will understand:

- Theory of Multiple Intelligences
- Personal profile of multiple intelligences
- Methods to reach variety of people through activating multiple intelligences



Agenda

- Theory of Multiple Intelligences
- Self-assessment – MI profiles
- Reflection and Discussion
- Methodologies
- Digital Media examples
- Storyboard development
- Presentation of storyboards

Theory of Multiple Intelligences

- Psychology, Biology, Anthropology Evidence
- Howard Gardner, Ph.D. – published 1983
- Each individual possesses eight (or more) different intelligences
- Intelligences both biological and learned
- Individual variation – which more developed

Linguistic & Logical-Mathematical

Linguistic

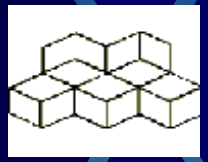
Sensitive to spoken and written language, meanings, and relationship of words. Interested in vocabulary, grammar, poetry, essays, and plays.

Logical-Mathematical

Abstract thought, counting, organization, logical structure. Interested in critical thinking activities, breaking words into smaller parts and reassembling them.

Spatial & Bodily-Kinesthetic

Spatial



Keen observation, visual thinking, metaphors. Interested in graphs, charts, color codes, guided imagery, pictures, posters, mind maps.

Bodily-Kinesthetic

Control of one's body and objects, good sense of timing. Interested in sports, hands-on learning, games, skits, plays.

Intrapersonal & Interpersonal

Intrapersonal

Strong sense of self, able to understand and access own feelings. Likes poetry, meditation, guided imagery, journal writing.

Interpersonal

Sensitive to others' moods, feelings, motivations; outgoing. Likes to talk with people, enjoys discussion groups, good at problem solving.

Musical & Naturalist

Musical

Sensitive to rhythm, pitch, intonation, music.
Likes poems, plays, jazz chants, rap music, songs, musically guided imagery.

Naturalist

Sensitive to nature, environment; can distinguish between types of rocks, flowers, birds. Loves to be outdoors, tend plants and animals.

Constructivist Learning Theory

- Based on research of Piaget
- Learning - result of individual's mental construction
- Individuals learn by actively constructing their own understanding
- Incorporate new information into base of knowledge already constructed in their minds
- Discovery learning - "True learning is based on discovery guided by mentoring rather than transmission of knowledge" John Dewey

Adult Learning

- Learn throughout their lives
- Transitional stages – cause for learning
- Diverse learning approaches
- Problem-centered and relevant
- Immediacy of application
- Past experiences
- Self-concept
- Self-directed

Self-Assessment

- Rate yourself on each intelligence
  - Assign number - 1 (lowest) to 10 (highest)
  - Each intelligence a different number
  - Tie between two intelligences okay
- Learning Strengths Inventory
  - Check statements that describe you
  - Ignore statements that don’t fit for you
- Learning Issues Inventory

Methodologies

- Entry Point Framework
- Multiple Representations
- Analogies and Metaphors
- Teaching for Understanding Framework

Entry Point Framework

- Narrative – introduce through story-telling
- Numerical – engage through computation
- Logical – deduction to learn new concepts
- Existential/Foundational – ask questions
- Aesthetic – engage senses through artworks
- Hands-On – experiential, manipulation
- Interpersonal – cooperative learning

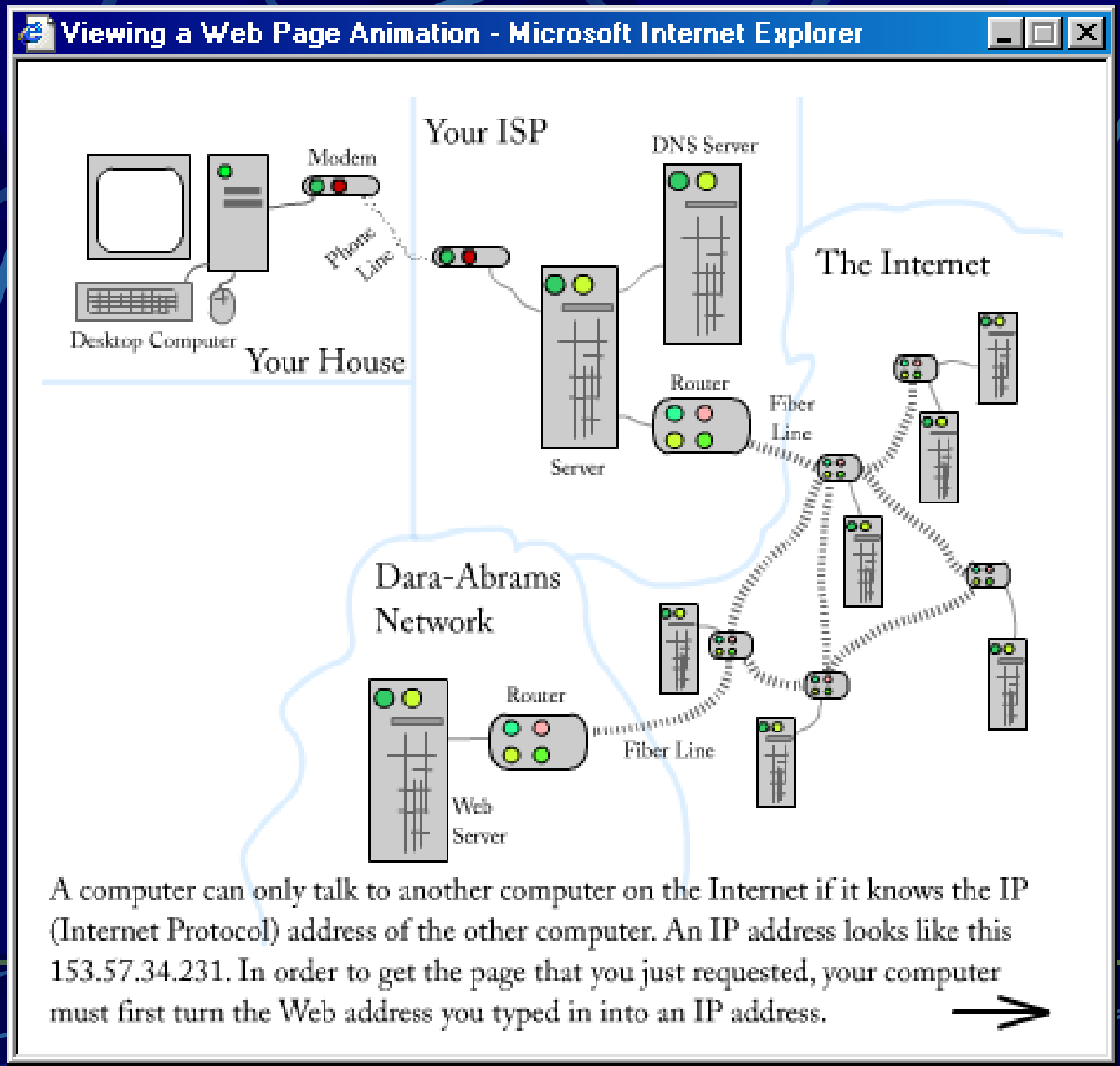
Multiple Representations

- Family of representations
- Activate different intelligences
- Present new concepts in multiple ways
- Content presentation activates more than one intelligence

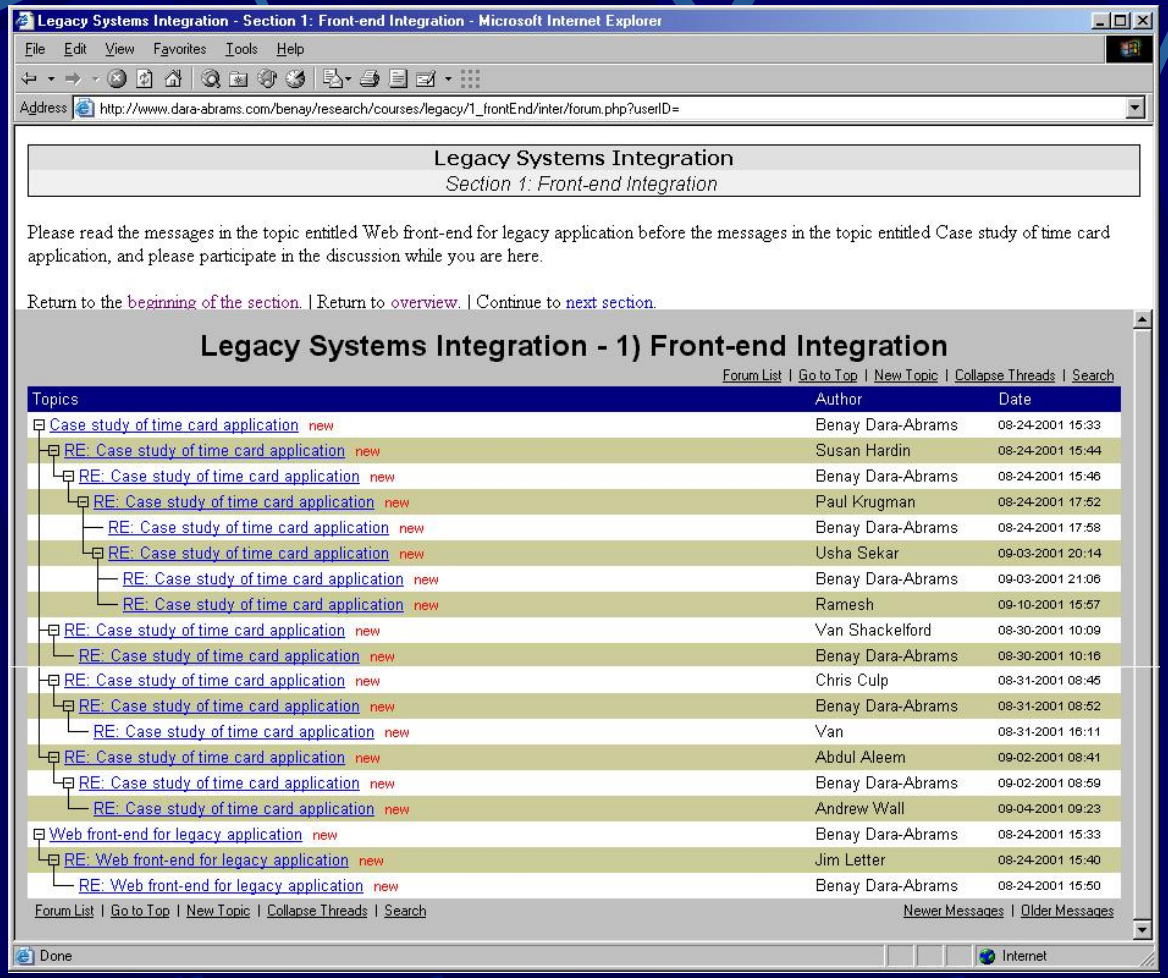
Explanation Variants

Intelligence	Explanation Variant	Technology
Linguistic	Prose, Textual Explanation	HTML, Word
Logic-Math	Bulleted List	HTML list
Spatial	Diagrams, Graphics, Movies	Flash, iMovie, PowerPoint
Musical	Sound Effects, Sound Track	Flash, Audio
Intrapersonal	Self-Guided Problem Analysis, Journals	HTML forms with script
Interpersonal	Discussions – problems, cases, questions	Threaded discussion
Naturalist	Categories and Metaphors	HTML lists, Flash
Bodily-Kinesthetic	Hands-on Exercises Simulations	Scripts Virtual Environments

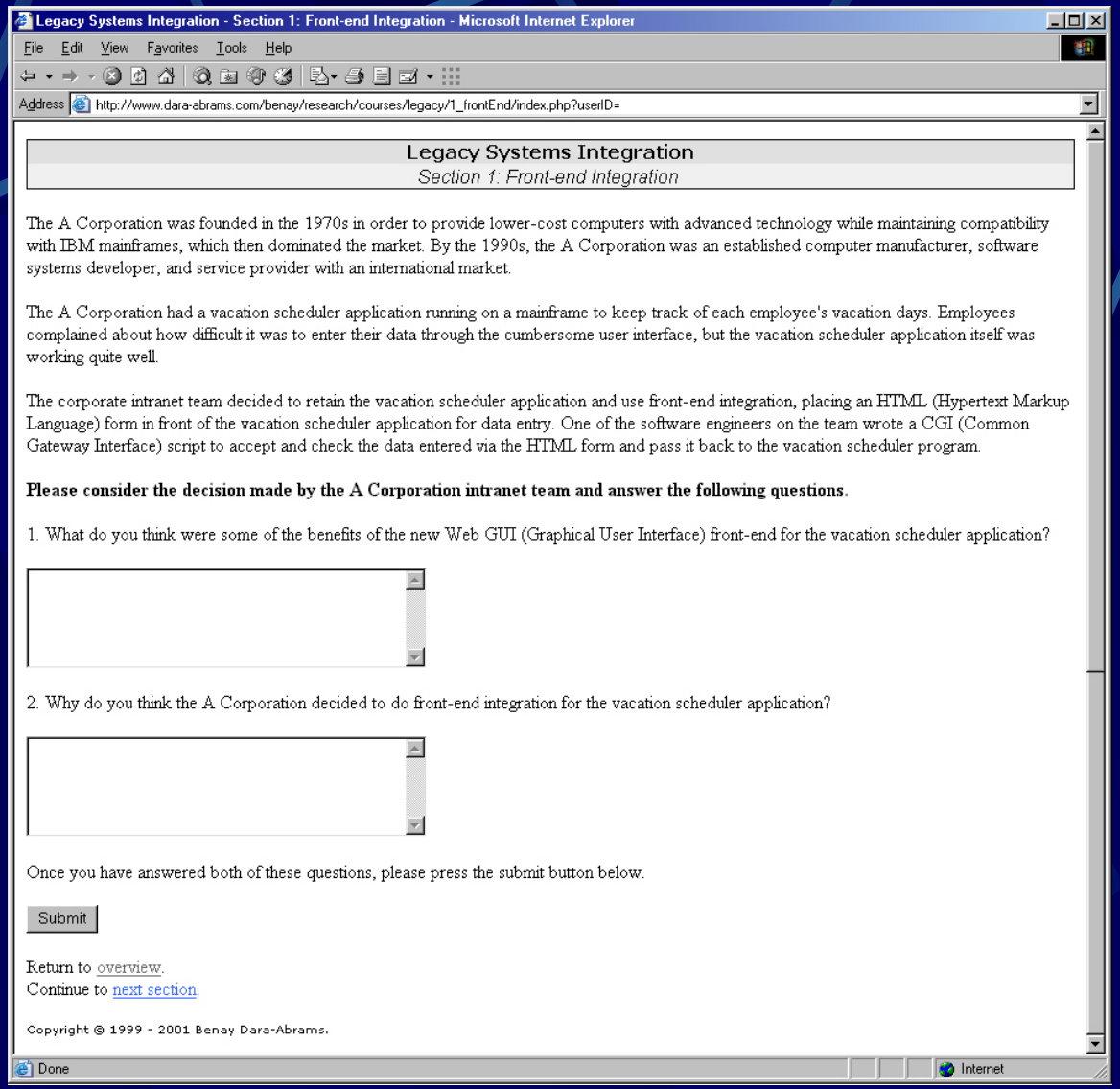
Spatial and Musical



Interpersonal



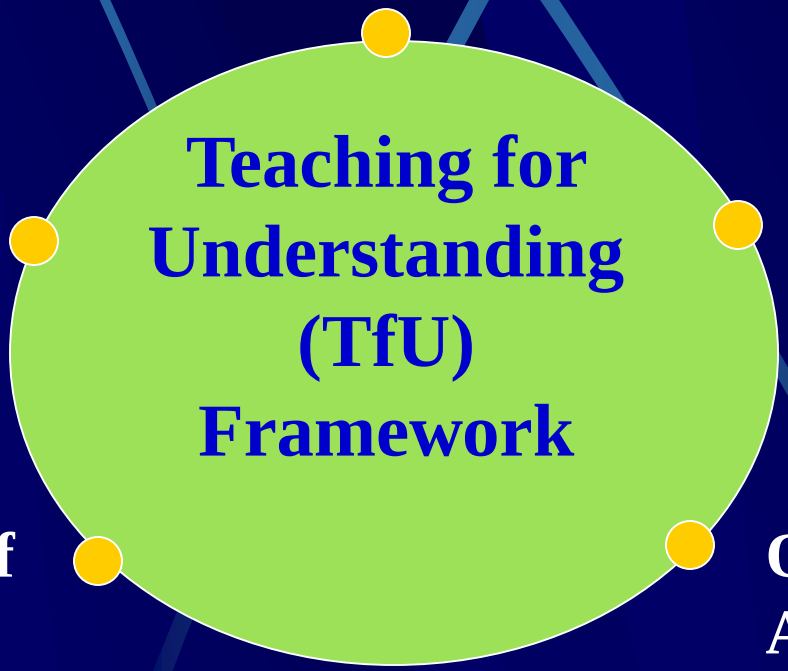
Intrapersonal



Analogies and Metaphors

- Start from people's experiences
- Identify known concepts
- Determine familiar features
- Connect new concepts to known
- Move from familiar features to new ones

Teaching for Understanding



http://learnweb.harvard.edu/ent/workshop/ccdt_framework.cfm

Storyboard Ideas

- Instructions for setting up and using new features on cell phones
- Collaborative learning course for university students
- Online service to help people make decisions about their retirement – financial, health, residence