

T-4 Tune Up Your Technology Training!

MICCA

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Adults As Learners

- Autonomous and self-directed
- Foundation of *life experiences* and *knowledge*
- Goal-oriented
- Relevancy-oriented
- Practical
- Require longer time in the performance of tasks
- Find little use for isolated facts
- Are less flexible

Principles of Adult Learning

- Learning is enhanced when:
 - It is immediately applicable to real life
 - Learners have control or influence over the experience

Principles of Adult Learning

- Learning is enhanced when:
 - Learners achieve self direction
 - Connections are created
 - Learners are successful

Learning Styles

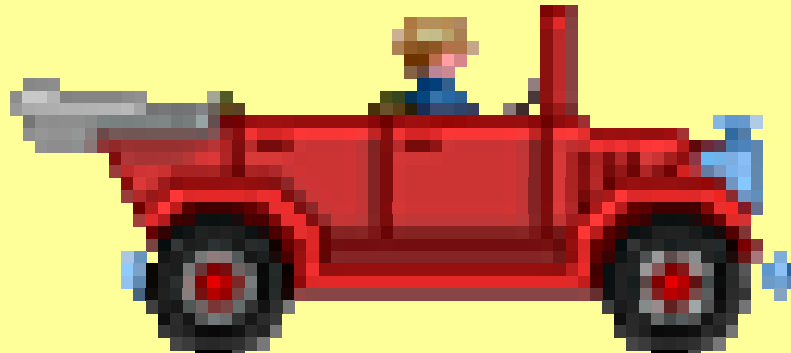
Litzinger & Osif, 1992

- Children to Adults...how we change
- Developing a preferred and consistent set of behaviors or approaches

Processes

- Cognition
 - acquiring knowledge
- Conceptualization
 - processing information
- Affective
 - motivation, decision making styles, values and emotional preferences

Driven to learn!



Kolb's Continuum

- **Concrete experience**
 - being involved in a new experience
 - labs, field work, observation, trigger films
- **Reflective observation**
 - watching others
 - developing observations about personal experience
 - logs, journals, brainstorming
- **Abstract conceptualization**
 - creating theories
 - lectures, papers, analogies
- **Active experimentation**
 - using theories to solve problems
 - simulations, case studies & homework

Challenges and Successes

Barriers



Brain Based Learning

Judith Sweeney 2002

- Everyone has a preferred learning style
- Your style --- your student's style
- How we teach
- How do you learn? Multiple Intelligence quiz

Learning Concepts

Judith Sweeney, 2002

- Present the whole first
 - facilitate understanding
- Criteria for “*Really Knowing*”
 - primary learning style
 - 1-20 repetitions needed
 - duration of exposure 2-60 seconds

Time and Time Again

Judith Sweeney, 2002

- Time and learning
 - cycles- attention, breathing, energy
 - shift of activity every 90-100 minutes
 - more breaks for novel information
 - 1 minute of instruction for every chronological year
 - up to 20 minutes for adults
 - follow with reflection and focus period

Movement and Learning

Judith Sweeney, 2002

- 20% of learners do best when moving
 - writing
 - typing
 - mouse movement
 - calculator

The Learning Environment

Judith Sweeney, 2002

Barbara Wolf, 2002

- Full spectrum lighting
- Background noise
- 67-70 degrees
- Visual stimulation-
 - seeing windows/doors reduces stress

The Learning Environment

Judith Sweeney, 2002

Barbara Wolf, 2002

- Olfactory-
 - Increase attention and learning
 - lemon, peppermint, cinnamon, rosemary
 - Stress reducing
 - Lavender
- Touch-
 - fidgets,
 - hands on activities

The Learning Environment

Judith Sweeney, 2002

Barbara Wolf, 2002

- Color background and text
 - Red Blue Green Black
- Taste-
 - alerting foods
 - Mint, crunchy, cinnamon,



How to Impact *Perceived* Benefit

- Answer: “What’s in it for me?”
- Focus on their needs
- Minimize discussion of ‘bells and whistles’
- Emphasize characteristics of ‘quality services’

Use Language that Makes Sense

- Participants at different stages of comfort are focused on totally different issues and interests
- What appeals to one does not appeal to some in the next group

-Moore (1999) P. Reed TAM/ATIA 2004

The Power of Reflection

- Discussing and reflecting is critical
- Shared reflection amplifies and creates new information
- Builds on significance with each new perception or interpretation

The difficult ones!

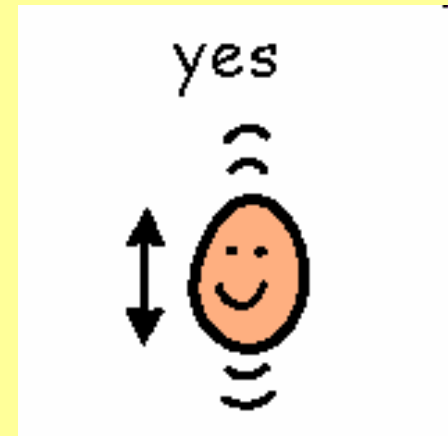
- Activity based, interactive and relevant training
- Invite participants to respond to questions/comments
- Avoid trying to please 1 cranky person
- Know what to say. “I respect your opinion, but we have to move on. I’m not sure we’re going to agree today.”

The difficult ones!

- Watch out for the “I hate to be the devil’s advocate, but...”
- Privately offer the individual the opportunity to leave if the session is not meeting his or her needs.

Utilize Persuasion

Simply smiling and nodding
head makes a difference in
attitude and opinion



OY! Annoying Elements

- Reading slides 60.4%
- Small text 50.9%
- Full sentences 47.8%
- Poor color choices 37.1%
- Moving text/graphics 24/5%
- Use of sound 22%
- Overly complex diagrams 22.%

Professional Development Models

- Ongoing plan for staff development
 - Support services enabling students (Curriculum)
 - Broad content addressing all aspects of instruction
 - Align with other local, state and national initiatives
 - Research based
 - Measurement of change in practice



On the run training



Change

- Pair with the plan for system change
 - Improving personal capabilities
 - Improving of the capacity of the system to provide services
 - Staff
 - Time
 - Forms
 - Directions

3 Months Post Training

- 90% of what they say as they do a thing
- 70% of what they say or write
- 50% of what they hear and see
- 30% of what they see
- 20% of what they hear
- 10% of what they read

Average Retention Rates

• Lecture	5%
• Reading	10%
• Audio visual	20%
• Demonstration	30%
• Discussion group	50%
• Practice by doing	75%
• Teaching others & Immediate use of learning	90%

References

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