

# Rethinking Adult Learning Principles in Medical Education: Five Teaching Perspectives

**Kadriye O. Lewis, Ed.D**

Children's Mercy Hospital, Department of Pediatrics  
University of Missouri Kansas City School of Medicine, Kansas City, Missouri

**Cheryll Albold, Ph.D**

Mayo School of Graduate Medical Education  
Mayo Clinic College of Medicine  
Mayo Clinic in Florida

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# Disclaimers

**Kadriye O. Lewis, Ed.D**

**Cheryll Albold, Ph.D**

We have documented that we have no financial relationships to disclose or Conflicts of Interest (COIs) to resolve.

Anyone who stops learning is old, whether at twenty or eighty. Anyone who keeps learning stays young.“~ *Henry Ford*

# Session Objectives

Describe five common perspectives on teaching adults with a tool called the Teaching Perspectives Inventory

Define the characteristics, attitudes, attributes and behaviors of adult learners, including effective principles/teaching strategies and assessment

Describe emerging pedagogies (self-determined learning approaches), including Brookfields' six principles of adult education and Vella's 12 principles for effective adult learning with recommended practices for application in medical education

Discuss adult motivations, learning needs, and practical strategies for innovative instructional design for adult learners

# What kind of teacher are you?








**Howard Chandler Christy "Scene at the signing of the constitution of the United States" (source: WikiMedia.org)**

# Activity I: Teaching Metaphor & Teaching Perspectives Inventory

## GROUP ACTIVITY: ARTICULATE WHO YOU ARE AS A TEACHER

1. On a sheet of paper, draw a picture of yourself working as a teacher. What metaphor does the picture suggest for your teaching? See the sample metaphors below. Ask yourself where do you fit and why? If you don't fit anywhere, come up with your own metaphor and explain it briefly. Then consider why your metaphor does not fit with those listed. What do you believe or value instead? This should help emphasize what is important to you as a teacher and reveal why you do what you do.
2. Now discuss your metaphors with your group members, including your own assumptions and beliefs about teaching and how these assumptions and beliefs inform your philosophy of teaching.
3. Provide brief reports back to full group /Return to large group for discussion.

Sample Metaphors	Description
<b>Lamplighters</b> 	They attempt to illuminate the minds of their learners.
<b>Gardeners</b> 	Their goal is to cultivate the mind by nourishing, enhancing the climate, removing the weeds and other impediments, and then standing back and allowing growth to occur.
<b>Muscle builders</b> 	They exercise and strengthen flabby minds so learners can face the heavyweight learning tasks of the future.
<b>Bucket fillers</b> 	They pour information into empty containers with the assumption that a filled bucket is a good bucket. In other words, a head filled with information makes an educated person.
<b>Challengers</b> 	They question learners' assumptions, helping them see subject matter in fresh ways and develop critical thinking skills.

# What is a Teacher?

**Counselor**

**Coach**

**Motivator**

**Judge**

**Referee**

**Nurse**

**Confidant**

**Listener**

**Advocate**

**Evaluator**

**Learner**

**Organizer**

**Collaborator**

**Model**

**Artist**

**Instructional  
Designer**



# A Program Director Position Description

- ....“The program director is encouraged to incorporate basics of **adult learning theory** into the curriculum and apply these theories when developing trainee learning experiences. In addition, the program director, in collaboration with key faculty, should provide training to residents and fellows in how to teach medical students and peers, consistent with their specialty specific Milestones.” .....

**Reference:** University of Washington GME Program Director Position Description



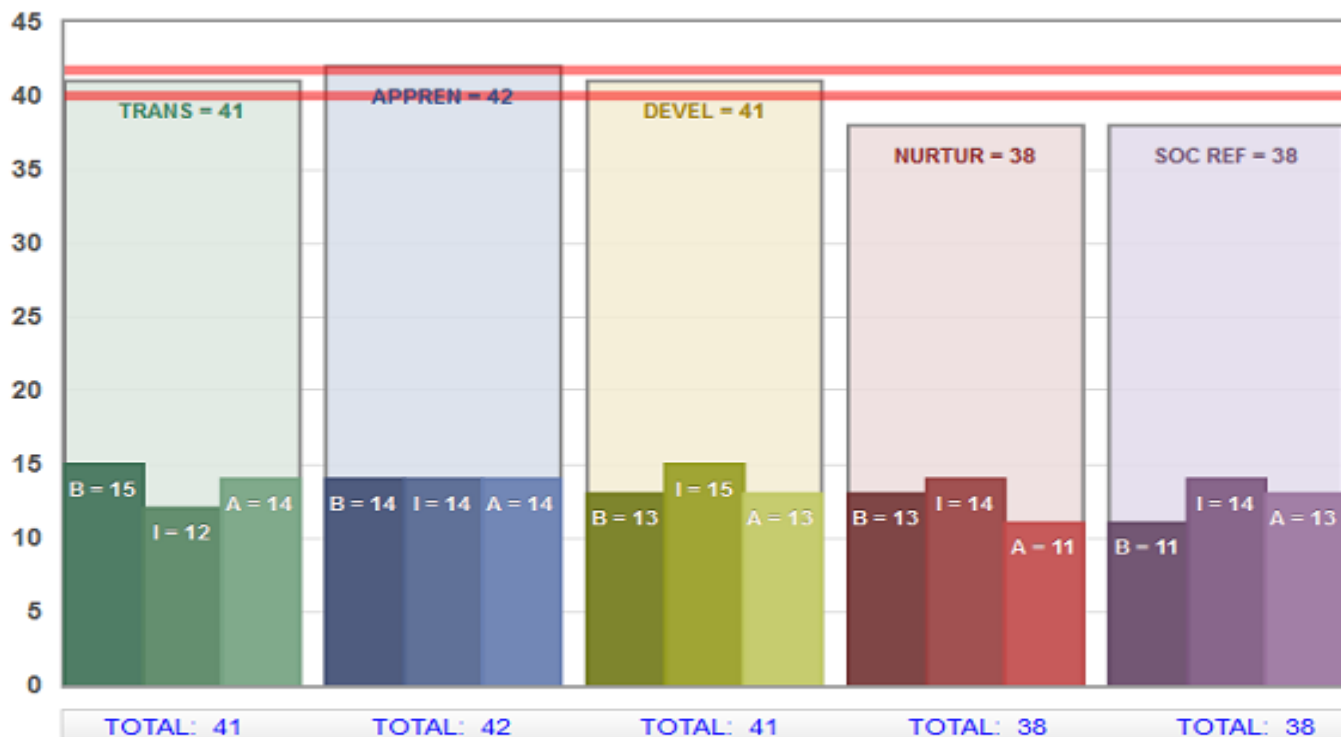
# Objective #1

- Describe five common perspectives on teaching adults with a tool called the Teaching Perspectives Inventory

# Teaching Perspectives Inventory

## TPI Profile Sheet

Thank you for taking the TPI. Your results are represented on the graph below. For information on how to interpret your results, please see the [Interpretation page](#)



Perspective totals on or above this line are DOMINANT for you.

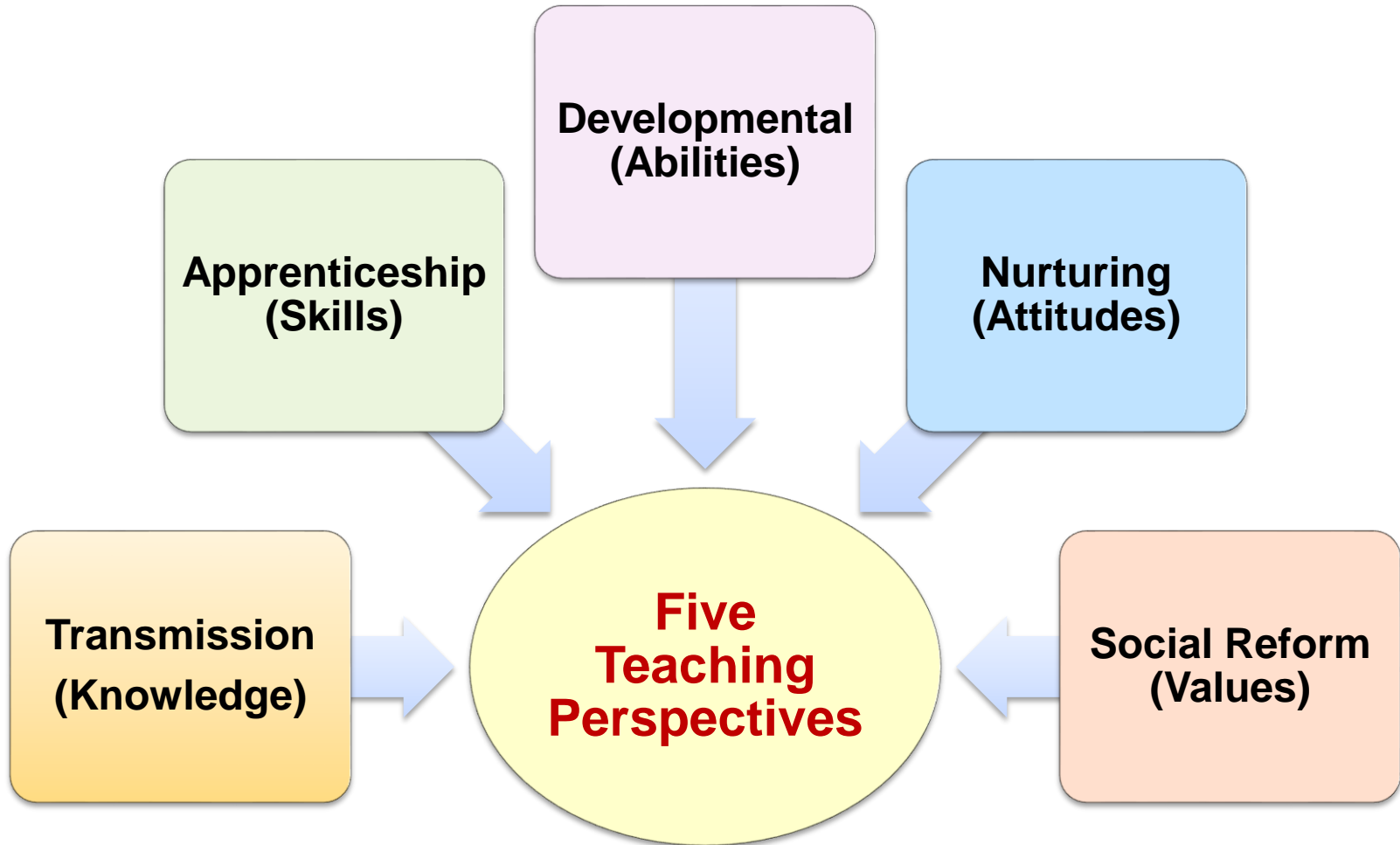
mean: 40  
SD: ±1.67

Perspective totals on or below this line are RECESSIVE for you.



B = Beliefs      What you believe about teaching and learning.  
I = Intentions      What you try to accomplish in your teaching.  
A = Actions      What you do when you're teaching.

# Five Teaching Perspectives



# Illustrative Cases for Five Teaching Perspectives



# TPI: Strengths and Challenges

Perspective	Practitioners	Strengths	Challenges
<b>Transmission</b> (Effective delivery of content)	...are committed to content and subject matter	Use of clear objectives that align with assessments, control sequence and pace of learning	Learners who do not see the logic of the chosen sequence of learning; sage on the stage so too much time spent talking!
<b>Apprenticeship</b> “Modeling ways of being ”	...transform the learner from a novice to a skilled practitioner	Use of a progression of meaningful tasks to help learners move towards competence based on their own starting point	Developing authentic tasks for all levels of competence; teaching/explaining complex skills to novices
<b>Developmental</b> “Cultivating ways of thinking”	... cultivate thinking and reasoning skills in the learner	Use of questions to challenge learners incrementally and provide meaningful examples	Choosing good questions and providing adequate time for learners to answer them themselves; creating assessments that measure complex reasoning
<b>Nurturing</b> “Facilitating self-efficacy”	... enable learning through promotion of trust and encouragement of self-sufficiency and self-confidence	Practitioners listen to learners and create relationships with learners	Balancing caring vs. challenge, teaching vs. counseling; assessing student achievement
<b>Social Reform</b> “Seeking a better society”	... provide the learner with the opportunity to embrace a set of ideals while learning about a discipline	Focus on the collective rather than individual. Content is related to the learners’ lives and subjected to critical reflection	Difficulty assessing student achievement; accepting those who object to the teacher’s ideals

# Teaching Philosophy

- Philosophy of Adult Education Inventory

## 2 Questions

### 1. In planning an educational activity, I am most likely to:

Identify, in conjunction with learners, significant social and/or political issues and plan learning activities around them.

1            2            3            4            5            6            7            (h)

Clearly identify the results I want and develop a program [or class or workshop] that will achieve those results.

**B = BEHAVIORAL ADULT EDUCATION** (Education for Competence, Behavioral Change, Compliance with Standards)

**L = LIBERAL (ARTS) ADULT EDUCATION** (Education for Intellectual Development; Comprehensive Education for Life)

**P = PROGRESSIVE ADULT EDUCATION** (Education for Practical Problem Solving & Application to Everyday Life)

**H = HUMANISTIC ADULT EDUCATION** (Education for Individual Self-Actualization)

**R = RADICAL ADULT EDUCATION** (Education for Social Change)

# A Student's Testimonial (Program Director)

- “I have a much clearer vision of who I am as a teacher, which is also how I see myself as a clinician. On some level, I have always seen these characteristics, but being able to put it into words really **formalized my philosophy**. This will serve as a great reference in the future when I am working on projects, starting to work with new learners, and to continually refine my [teaching] skills.”




# How TPI influences one's teaching methods and effectiveness




# Teaching Perspectives

**BELIEFS** - What do you believe about  
instructing or teaching?



**INTENTIONS** - What do you try to accomplish  
in your instruction or teaching?



**ACTIONS** - What do you do when instructing  
or teaching?

# Teaching Perspectives

Themes		Sample Items from the TPI
<b>BELIEFS</b>	What do you <b>believe</b> about instructing or teaching?	32. To be an effective teacher, one must be an effective practitioner. 36. Teachers should be virtuoso performers of their subject matter. 38. Teaching should focus on developing qualitative changes in thinking.
<b>INTENTIONS</b>	What do you <b>try to accomplish</b> in your instruction or teaching?	17. My intent is to demonstrate how to perform or work in real situations. 21. I expect people to master a lot of information related to the subject. 30. I want to make apparent what people take for granted about society.
<b>ACTIONS</b>	What do you <b>do</b> when instructing or teaching?	1. I cover the required content accurately and in the allotted time. 2. I link the subject matter with real settings of practice or application. 3. I ask a lot of questions while teaching.

# Objective #2

- Define the characteristics, attitudes, attributes and behaviors of adult learners, including effective principles/teaching strategies and assessment

# Video Clip

- Let's see what happens when we don't consider our learners' learning needs (backgrounds, life experience, and current level of knowledge).



# Adult Learning

What does adult learning mean to you?

What should adults learn? Why?

How should adults learn? Why?

# Adult Learning

A word cloud centered around the word "Learning" in large orange font. Other words include: "Education" (green), "Growth" (green), "Development" (orange), "Lifelong" (green), "Continuing" (red), "Adult" (black), "Continuous" (yellow), "Personal" (purple), "Professional" (red), "On-demand" (black), "Self-education" (orange), "Self-directed" (green), "Work-based" (red), "Individualized" (green), "Process" (red), and "Self-determined" (yellow).



# Key Principles of Adult Learning and How These Affect the Teaching Process - REAPS

- **Respect** Openness and respect,  
Avoid “talking down”
- **Experience** Use experiential techniques
- **Application** Relate material to practical applications  
Encourage independent projects
- **Practice** Provide multiple opportunities to practice
- **Self-Concept** Encourage self-directed learning, facilitate  
the process

# Variables Affecting Adult Learning

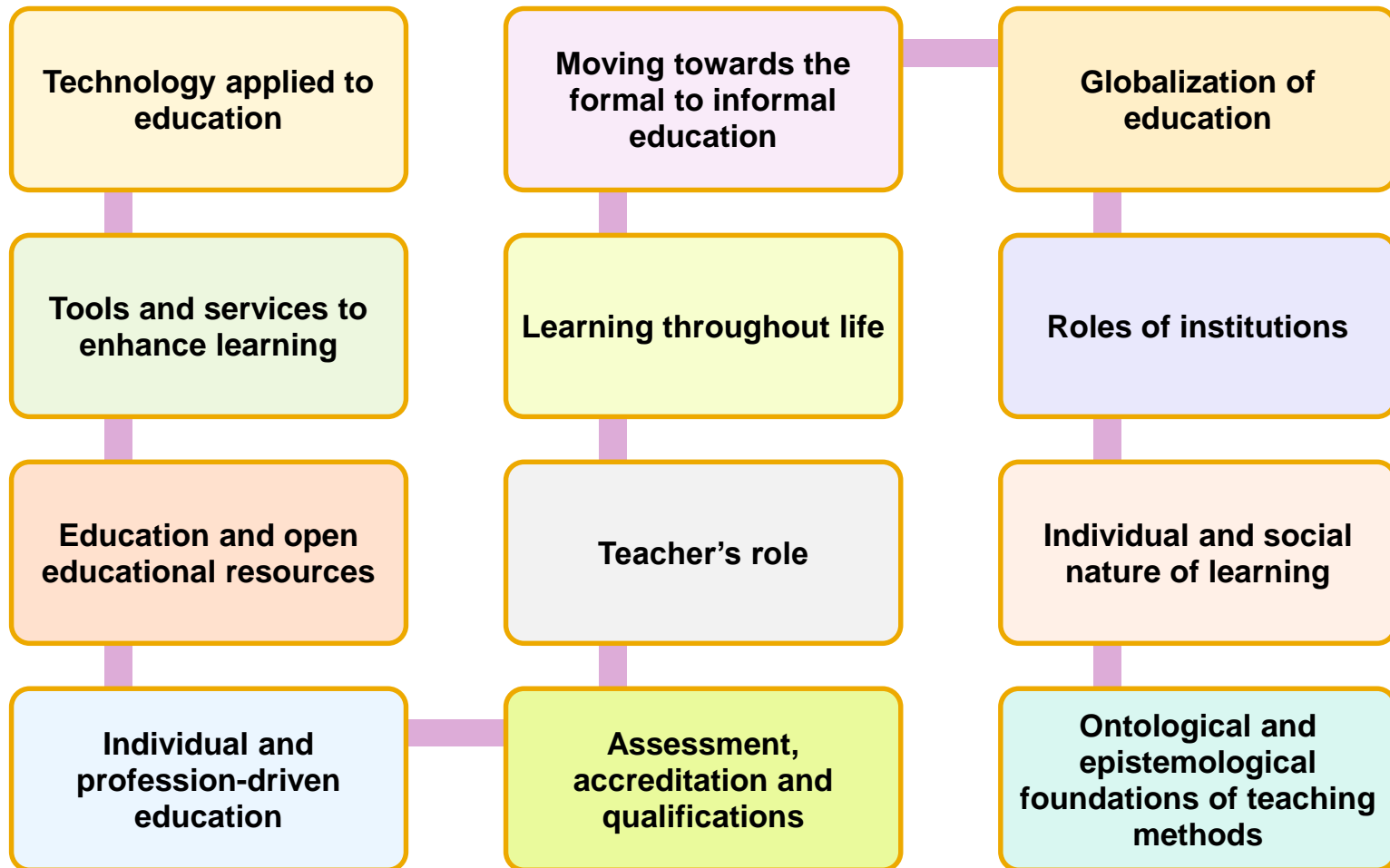
Current curriculum does not frame the issues facing health care (inflexible and excessive).

Doesn't help with personal development of students' strengths (learners' goals).

Breakdown barriers for students with faculty (relationships).

Engage them in system changes (meet their needs).

# Main Changes to Education: Emerging Pedagogies



# Assessing Adult Learning

Methods of Assessment	Description	Strategies
<i>Performance Assessment</i>	Learners are given a variety of tasks and situations where they can demonstrate understandings and apply knowledge, skills, and the foundations of science to a variety of contexts.	<ul style="list-style-type: none"> <li>• Special clinical skills exam</li> <li>• Clinical tutor evaluation</li> <li>• Laboratory reports</li> <li>• Observed long case</li> <li>• Case presentation</li> <li>• Clinical tutor assessment</li> <li>• Case assessment</li> </ul>
<i>Authentic Assessment</i>	Assessments tie directly to the applications of the knowledge, skills, and attitudes in the real world.	<ul style="list-style-type: none"> <li>• Simulation-based scenarios</li> <li>• Procedural checklist</li> <li>• OSCE/CEX</li> <li>• CQPI</li> <li>• Project-based instruction,</li> <li>• Learning analytics /footprints</li> </ul>
<i>Holistic Assessment</i>	Multi-channel, global assessment that incorporates a wide range of assessment pieces to provide a total picture of the learner.	<ul style="list-style-type: none"> <li>• Peer/self assessment</li> <li>• Portfolios</li> <li>• Problem or project-based learning</li> <li>• Invention</li> <li>• Learning contracts</li> </ul>

# Objective #3

- Describe emerging pedagogies (self-determined learning approaches), including Brookfields' six principles of adult education and Vellas 12 principles for effective adult learning with recommended practices for application in medical education

# Self-Determined Learning (Heutagogy)

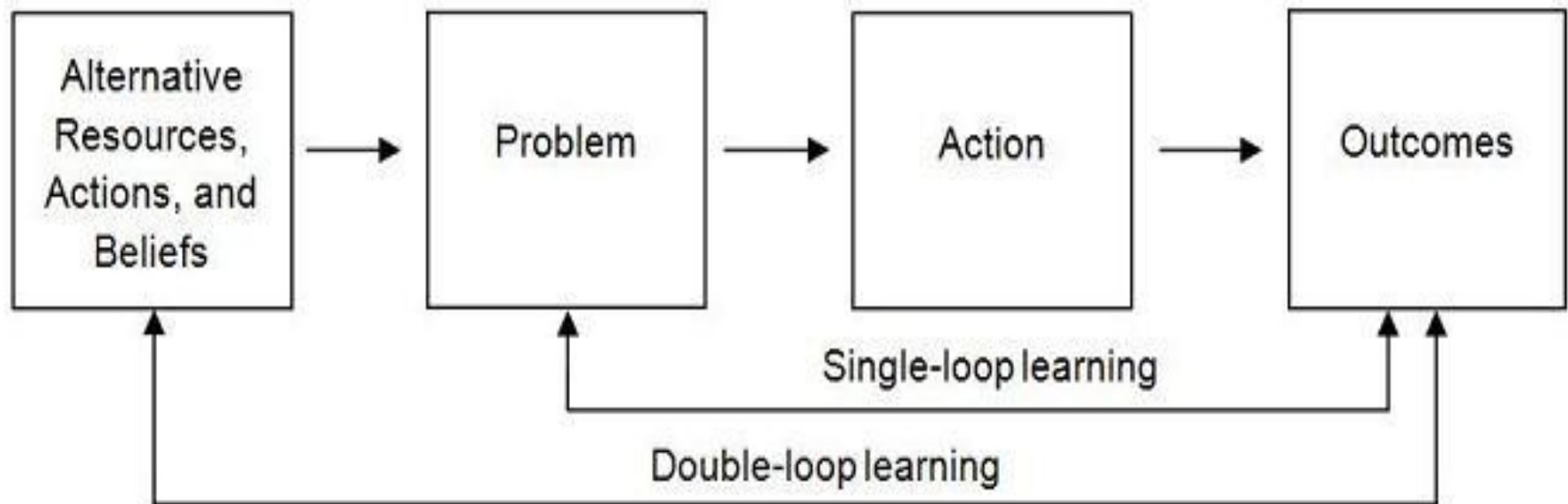
Heutagogy is the study of self-determined learning and applies a holistic approach to developing learner capabilities with the learner serving as the major agent in their own learning, which occurs, as a result of personal experience

# Self-Determined Learning

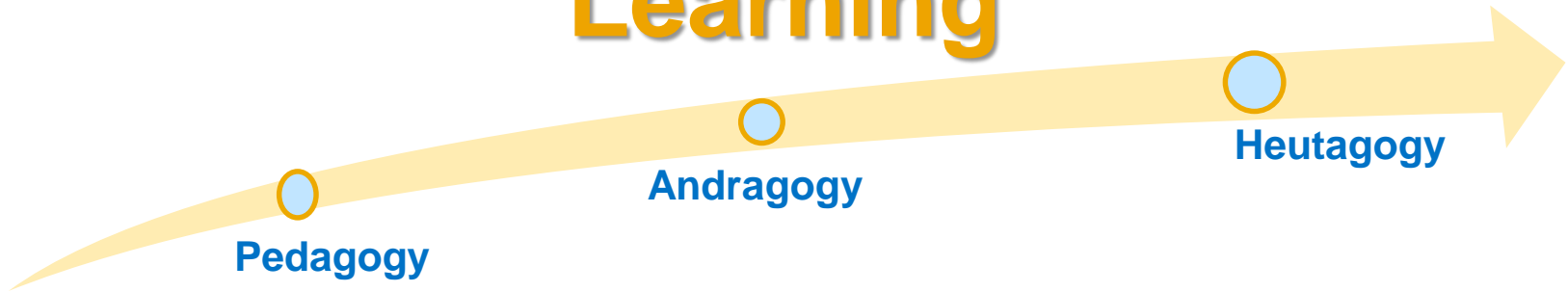




# Self-Determined Learning



# Self-Directed vs. Self-Determined Learning



Andragogy (Self-directed)	►	Heutagogy (Self-determined)
Single-loop learning	►	Double-loop learning
Competency development	►	Capability development
Linear design and learning approach	►	Non-linear design and learning approach
Instructor-learner directed	►	Learner-directed
Getting students to learn (content)	►	Getting students to understand how they learn (process)

# Adult Learning Principles

Vella's 12 Principles	Brookfield's Six Principles	Knowles' Six Assumptions
Needs Assessment	Voluntary participation	Self concept
Safety	Self-worth	Learner's experience
Sound Relationship	Collaborative	Readiness to learn
Sequencing	Praxis	Orientation to learning
Praxis / Action with reflection	Critical reflection	Motivation to learn
Control	Self-directed and empowered	Need to know
Feelings / Emotions		
Immediacy		
Clear Roles		
Teamwork		
Engagement		
Accountability		

# Activity II: Small Group Activity (Scenario)

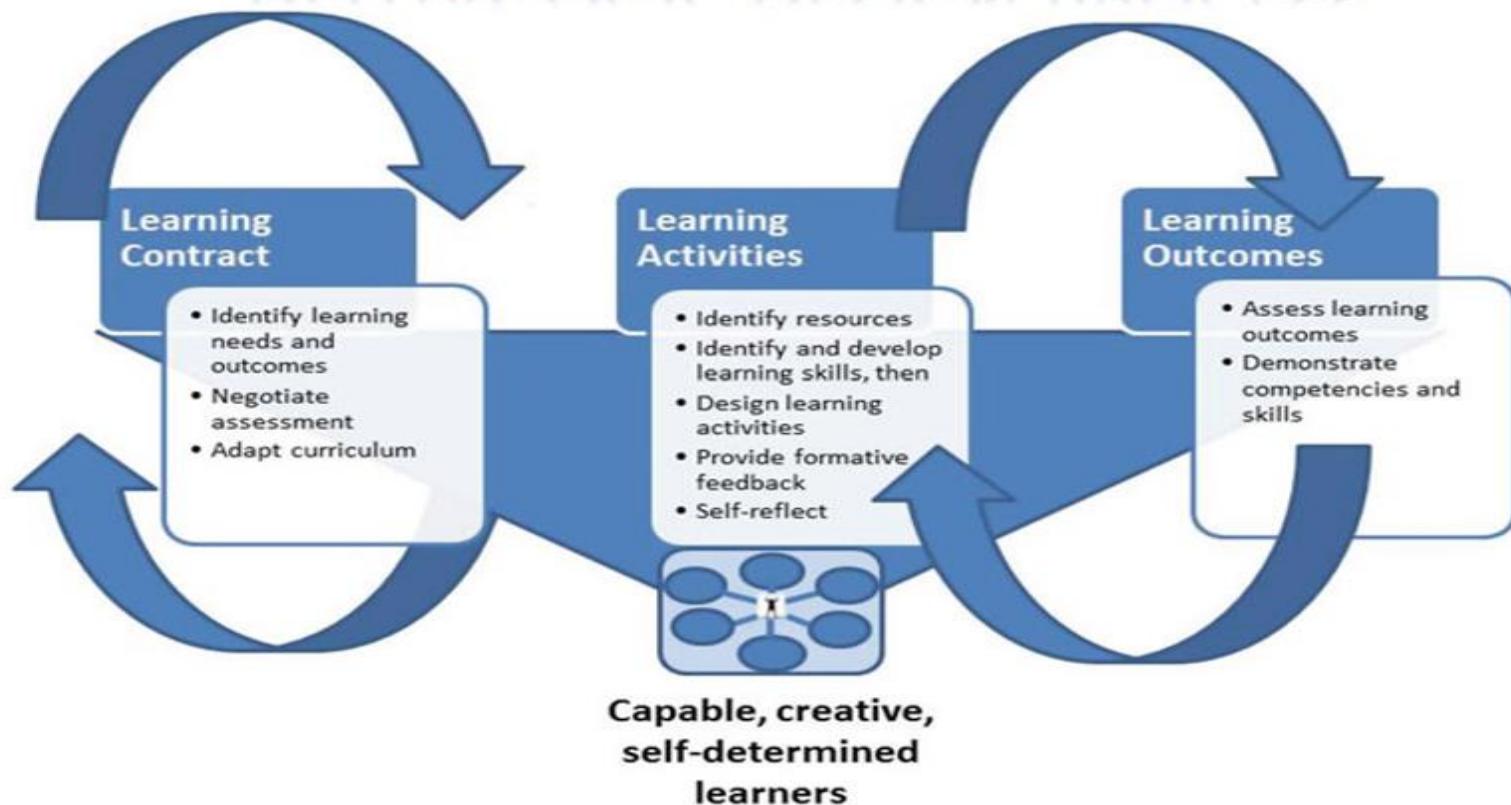


# Objective #4

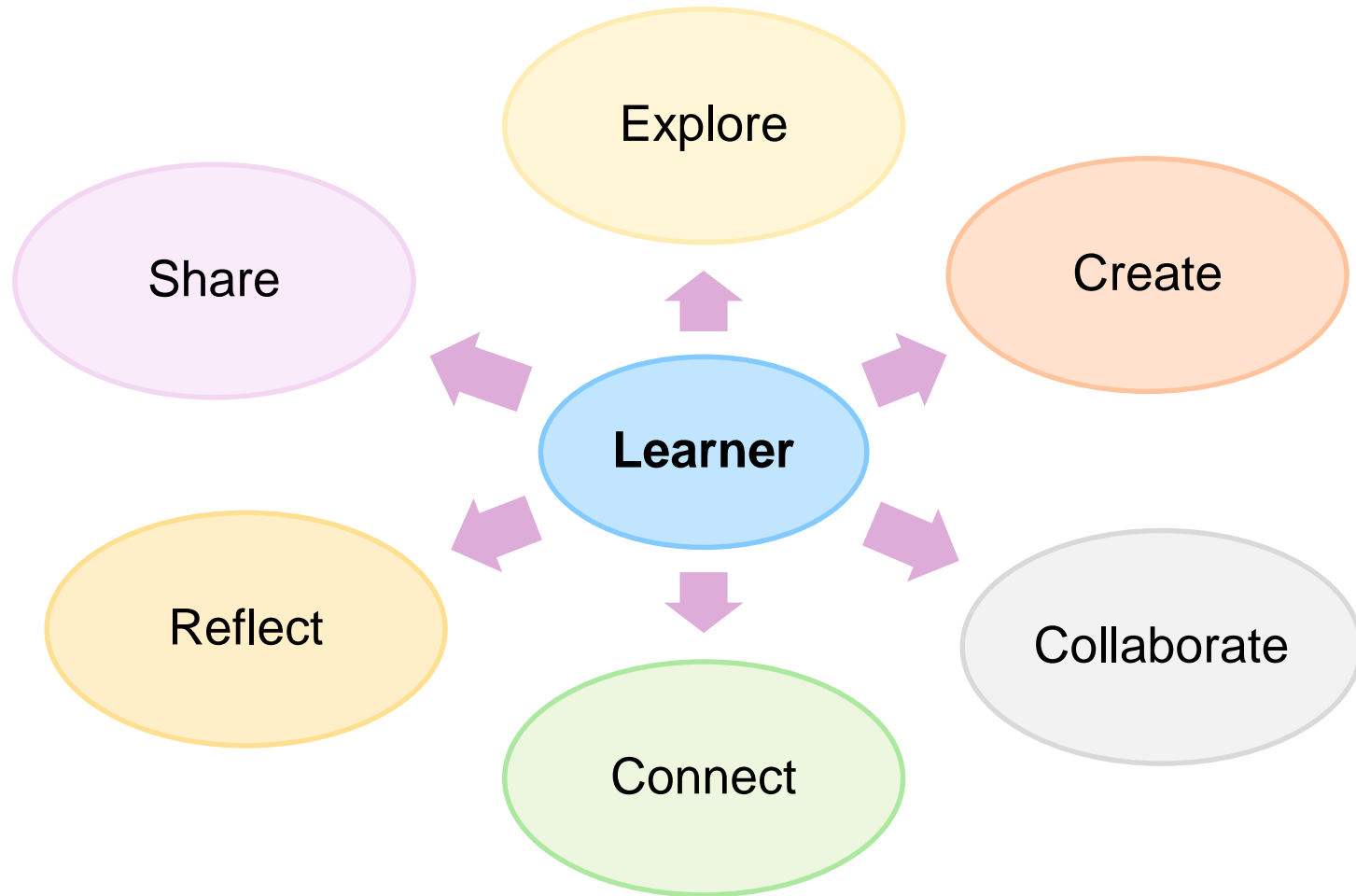
- Discuss adult motivations, learning needs, and practical strategies for innovative instructional design for adult learners

# Self-Determined Learning / Heutagogic Design Process

## HEUTAGOGIC DESIGN PROCESS



# Self-Determined Learning / Heutagogic Design Elements





A watercolor illustration depicting a scene from the story. A boy in a blue shirt and dark pants is running up a purple hill, carrying a large red kite. A monkey is on the left, reaching out towards the kite's string. A dog is on the right, looking towards the boy. A bird is flying in the sky above the boy. The background features soft, hazy mountains.

# THE THREE QUESTIONS

*Based on a story by Leo Tolstoy*

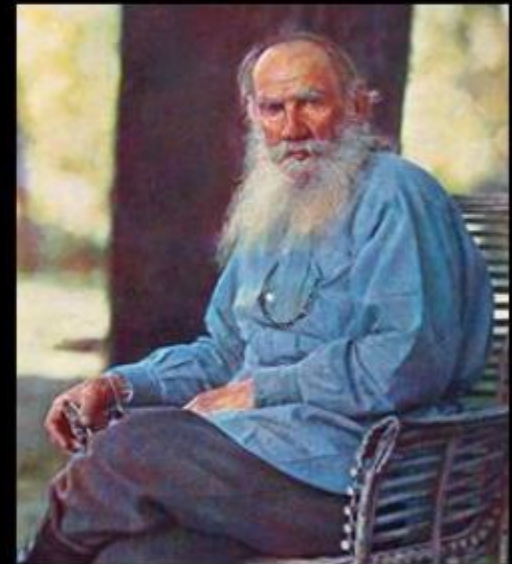
*Written and illustrated by Jon J Muth*

# ***“The Three Answers”***

The most important time is  
**“Now”**

The most important person is  
**“The one you are with”**

The most important pursuit is  
**“To do good to that person”**



Leo Tolstoy

# Take Home Message

**Best time** for a transformation in medical education.

Our learners are the **right people** to listen to.

Re-examine our educational practices and learning environments is **most important thing to do**.

Develop an authentic teaching identity and understand your own teaching persona (Who am I when I teach?)

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# Thank You!



**Contact Information:**

**Kadriye O. Lewis, Ed.D**

Director of Evaluation and Program Development  
Professor of Pediatrics, UMKC School of Medicine  
GME, Children's Mercy Hospital  
2401 Gillham Road  
Kansas City, MO 64108  
Ph: (816) 234-3308  
Email: [kolewis@cmh.edu](mailto:kolewis@cmh.edu)

**Cheryll Albold, Ph.D**

Mayo School of Graduate Medical Education  
Mayo Clinic College of Medicine  
Mayo Clinic in Florida  
4500 San Pablo Road  
Jacksonville, FL 32224  
Ph: (904) 953-6718  
Email: [Albold.Cheryll@mayo.edu](mailto:Albold.Cheryll@mayo.edu)