

# Adult Learning Theories- Important in Classroom and Clinical Training

Richard Wilson, DNAP, CRNA, FAANA  
DreamMaker Anesthesia Services, LLC

Objectives

Teaching

Adult  
Learning

Theories

The  
Learner



## Objectives

*At the end of this workshop, the participant will be able to:*

- 1) Distinguish the differences between didactic and clinical setting learning.
- 2) Recognize theories associated with adult learning.
- 3) Discuss how the adult learning theories apply to different learner settings.
- 4) Recognize their preferred method of learning.

Disclosures

I have no financial conflicts of interest to disclose

I will not be discussing off-label medication use



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## Effective Instructor

**Possesses and demonstrates broad knowledge.**

**Explains the basis for actions and decisions.**

**Answers learner questions clearly and precisely.**

**Open to conflicting ideas and opinions.**

**Connects information to broader concepts.**

**Communicates clear goals and expectation.**

**Captures learners attention.**

Precept/  
Teach

# Effective Preceptorship

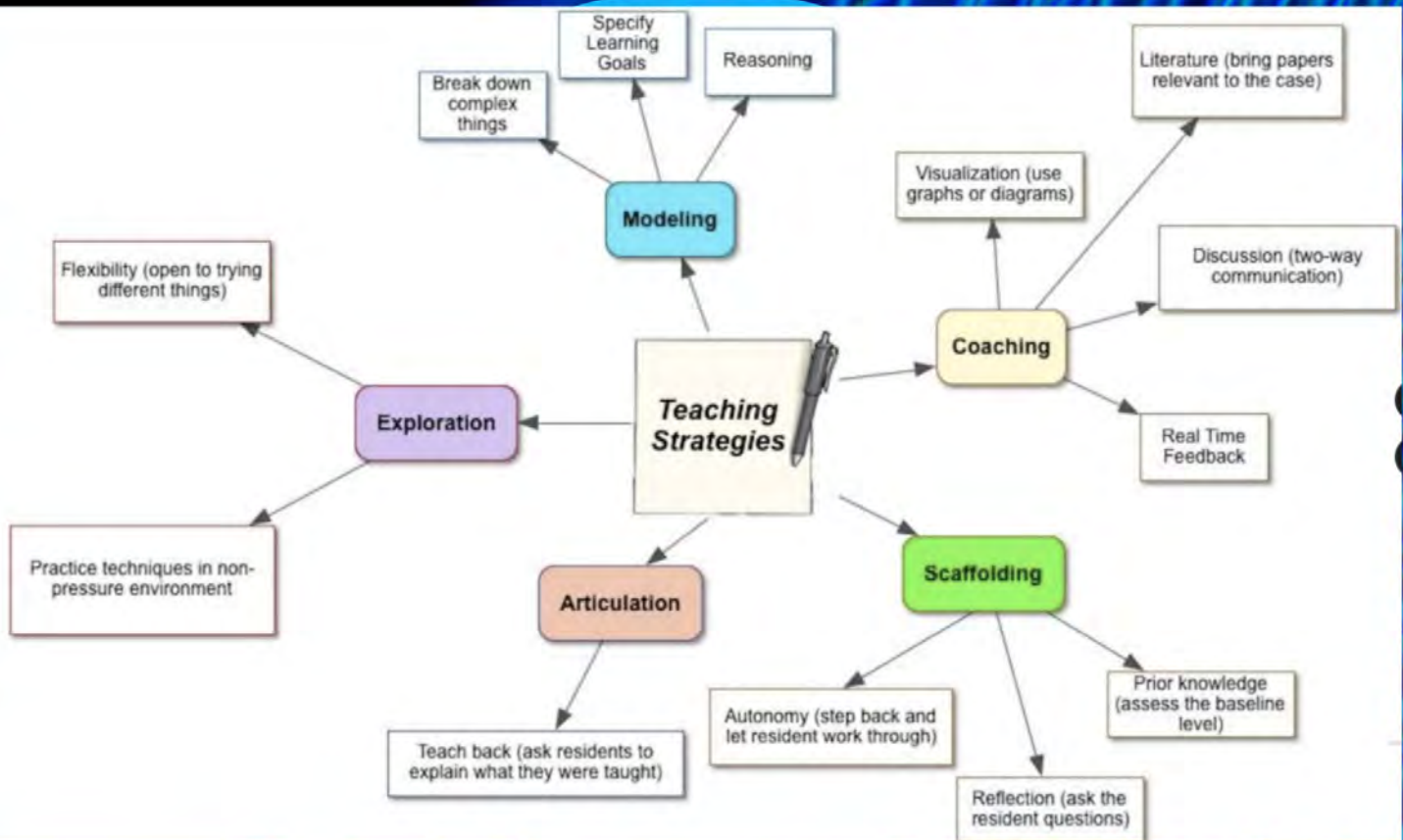


What Makes for Good Anesthesia Teaching by Faculty in the Operating Room? The Perspective of Anesthesiology Residents

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Teaching Strategies



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## Adult Learning

Malcolm Knowles (1968)

Art and science of adult learning

How adults learn and how it differs from children

Adults become more self-directed as they mature

Gives insight on how to set up learning  
environments to get the most out of them

Come with knowledge and life experiences to  
apply to learning

Children  
vs  
Adult

Principles

Challenges

Children	Adults
Child-oriented learning provides a basic foundation of knowledge and helps develop critical thinking skills.	Adults have an existing base of knowledge and life experience. They seek out <b>continuous learning</b> based on personal interests, wants, and needs.
Children typically have no choice but to study and may lose enthusiasm if they are not engaged in what is happening around them.	Adults understand why they're learning, so their motivation levels are naturally high.
It's necessary to be in charge of the classroom.	It's beneficial to let adults work things out for themselves and organize themselves.
Teachers play a central role in delivering knowledge and guiding learning activities.	The role of "teacher" may be effectively filled by a mentor, coach, training facilitator, peer, or subject matter expert.

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**Children vs Adult**

**Principles**

**Challenges**

## Adult Learning Principles

- Self-directing
- Learn by doing
- Desire relevance
- Utilize experience
- Process with their senses
- Appreciate repetition
- Guide their own development
- Thrive with goal setting
- Learn differently than children
- Require ownership

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## Adult Learning Challenges

**Lack of time**

**Self-doubt**

**Neuroplasticity**

**Financial barriers**

**Contradiction**

**Lack of Support**

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## Learning Theories

Andragogy  
Transformational Learning  
Experiential Learning  
Self-directed Learning  
Project Based Learning  
Action Learning

Theories

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Theories

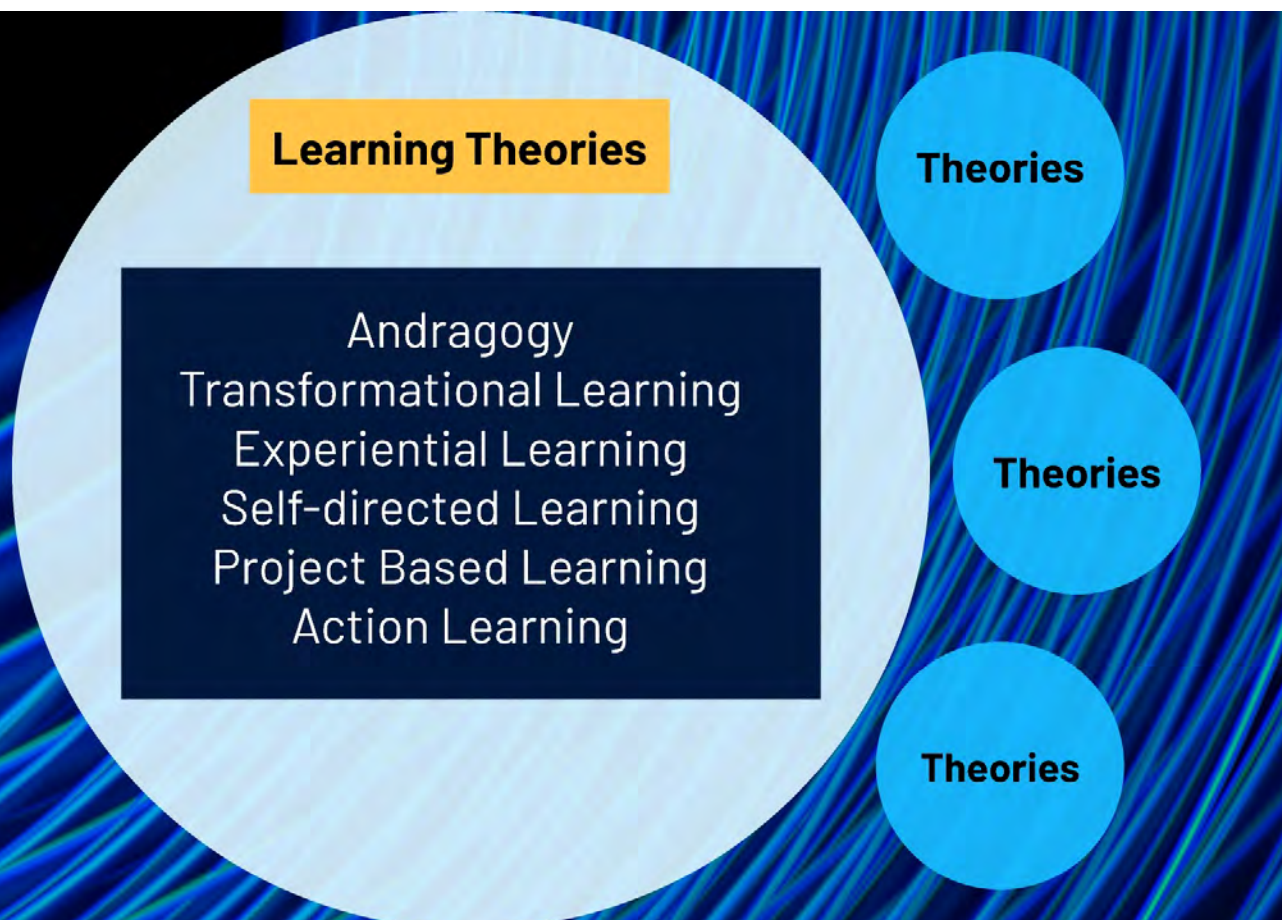
# Learning Theories

## **Andragogy**

- autonomous and self-directed
- seek learning based on personal needs
- must be able to apply what they learn in a practical way
- best suited for problem solving, structured formal learning & those with a defined need

## **Transformational Learning**

- beliefs and expectations shape their views
- can change old beliefs and develop new ones through analytical process
- best suited for complex analytical processes, evaluation and analysis, & long-term personal growth



# Learning Theories

## ***Experiential Learning***

- hands on approach of learning
- learner is at center of learning process
- active process of doing and reflecting
- best suited for mechanical skills, leadership skills, process improvement, & systematic thinking

## ***Self-Directed Learning***

- individual takes ownership of learning process
- diagnose learning needs, identify resources, implement learning, & assess their results
- best suited for process updates, self-motivated learners, & technology and software skills

## Learning Theories

Andragogy  
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# Learning Theories

## ***Project Based Learning***

- active investigation of real world problems
- voice in the overall process through a process of inquiry, critical thinking, problem solving, collaboration, and communication
- best suited for project management, process improvement, & manufacturing

## ***Action Learning***

- result of programming and questioning
- take action on a problem and evaluate the results
- best suited for team building, filling in knowledge gaps, & uncover areas of learning need

## **Learning Theories**

Andragogy  
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## Characteristics for Successful Adult Learning

Not afraid to ask for help/support

Open minded

Results oriented

Drive/passion to learn

Ability to use the resources around you

Strong listening skills

Being responsible

Goal oriented

Resilient

Stages of  
Adult  
Learning

Bloom's  
Taxonomy

Summary

Phase	Learner's roles
Dissonance phase	<ul style="list-style-type: none"> <li>Identify prior (base-line) knowledge, skills and attitudes</li> <li>Recognise what is unknown</li> <li>Recognise personal development and learning needs</li> <li>Participate in planning personal learning objectives and relevant experiences</li> </ul>
Refinement phase	<ul style="list-style-type: none"> <li>Think of many possible explanations or solutions to the case or problem.</li> <li>Work out which are the most likely resources to refine the possibilities</li> <li>Actively participate in the activity and experiences</li> <li>Refine the information into a hypothesis</li> </ul>
Organisation phase	<ul style="list-style-type: none"> <li>Test and re-test the hypothesis</li> <li>Organise the information into a "story" that makes sense to the learner</li> </ul>
Feedback phase	<ul style="list-style-type: none"> <li>Articulate the knowledge, skills or attitudes developed</li> <li>Provide feedback to peers and staff</li> <li>Accept, and if appropriate act upon feedback received from others</li> </ul>
Consolidation phase	<ul style="list-style-type: none"> <li>Reflection in the light of prior knowledge</li> <li>Reflection on the learning process</li> <li>Evaluate personal responsibility for the learning</li> <li>Development of knowledge, skills and attitudes</li> </ul>

David C. M. Taylor & Hossam Hamdy (2013) Adult learning theories: Implications for learning and teaching In medical education: AMEE Guide No. 83, Medical Teacher, 35:11, e1561-e1572, DOI: 10.3109/0142159X.2013.828153

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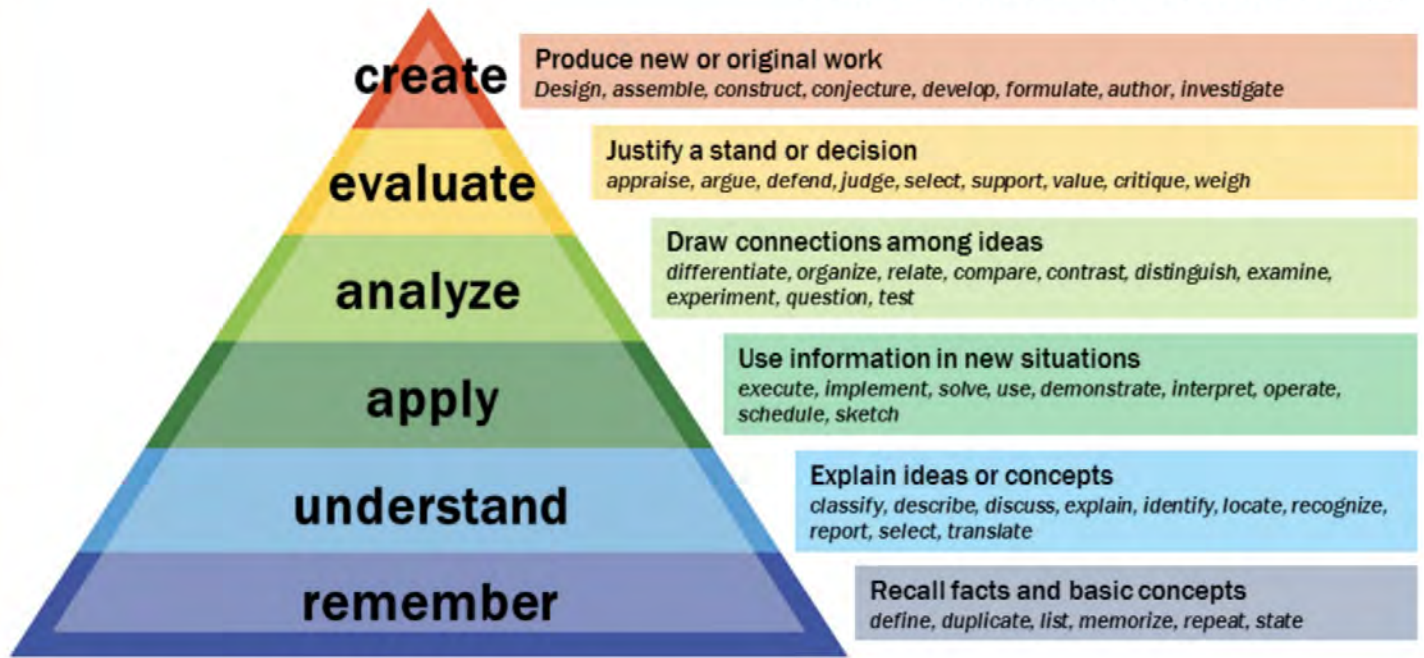
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**Stages of Adult Learning**

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# Bloom's Taxonomy



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Stages of Adult Learning

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Summary



# Importance of Adult Learning

- Adapt to a changing workforce
- Unlock career advancement opportunities
- Enhance personal growth and well-being
- Nurture cognitive abilities
- Promote social inclusion
- Embrace technological advancements

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