

# Residents are Also Teachers: Quick Tips for Effective Adult Education

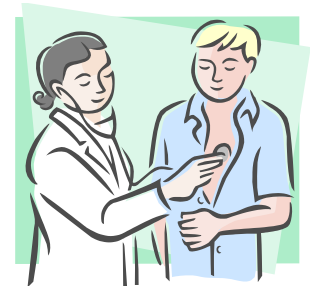
▪Karen Hughes Miller, PhD

▪University of Louisville School of Medicine  
Office of Graduate Medical Education



# Why we need to learn about adult education...

- ▶ You may not have thought about this before, but as much of 25% of your time as a resident may be taken up with teaching medical students.<sup>1</sup>
- ▶ And, after residency, patient education will be an important part of your career.<sup>2</sup>

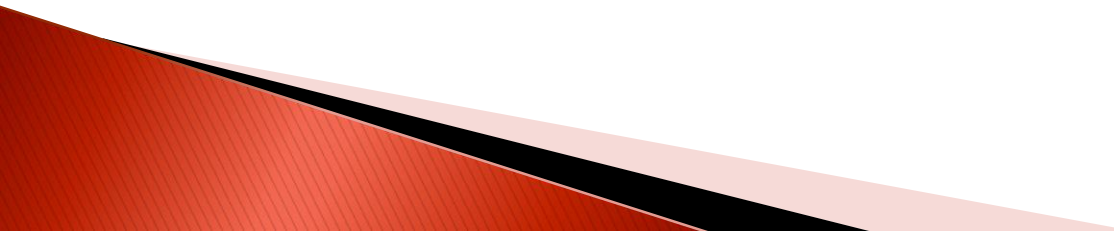


# Why we need to learn about adult education

- ▶ The good news is that you already know a great deal about successful teaching!
- ▶ Remember some of your own teachers over the years who were skilled not only at sharing new information, but also in making you think!
- ▶ Try to recall what these educators did to help you learn.



# Why we need to learn about adult education

- ▶ When we are children, our major job is learning. But we continue to learn even more as adults.
  - ▶ Interestingly enough, educators have realized that there are distinct differences between how children and adults should be taught.
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# The background of adult education as a science

- ▶ Malcolm Knowles (1913–1997) was one of the first to explore this idea. He used the term andragogy to differentiate adult learning from pedagogy that refers to ways in which children learn.<sup>3</sup>

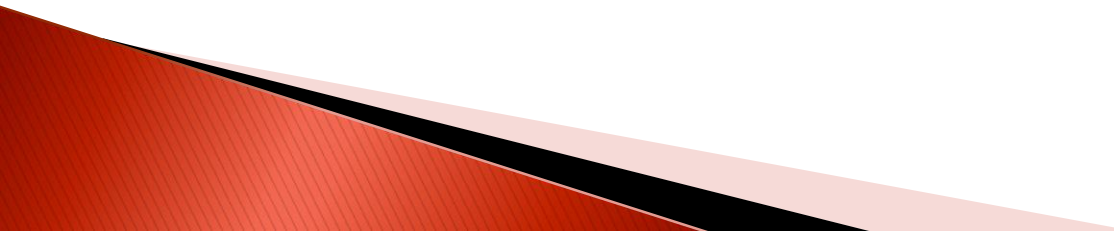


## Resource links

<http://www.lifecircles-inc.com/Learningtheories/knows.html>

<http://www.infed.org/thinkers/et-knowl.htm>

# Andragogy in Action

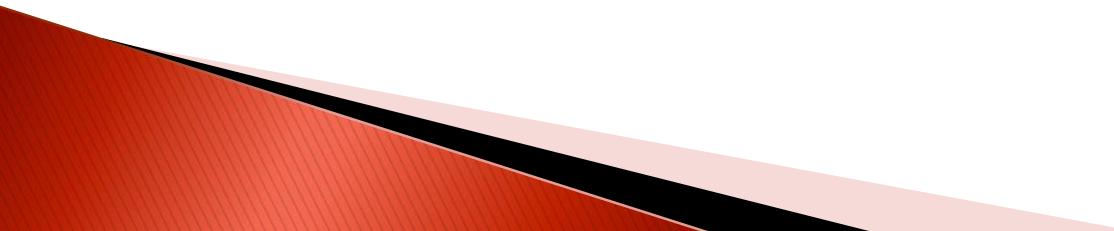
- ▶ Knowles came from a humanistic orientation and believed that *self-actualization* was the prime objective of adult learning.
  - ▶ The mission of adult educators (all of us who teach) is to assist learners to develop and achieve their full potential as emotional, psychological, and intellectual beings– not to just “drill in” new facts.
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# The Basic Assumptions:

- ▶ One reason that Knowles' work is still popular today is that these ideas are so practical!
- ▶ We can apply them in many instructional settings– and certainly in clinical settings.

# The Basic Assumptions:

Knowles began with four assumptions about adults as learners:

- 1) Adults tend to be more **self-directed** (than children) as a result of their maturity,
  - 2) Adults possess personal histories which define their identities and serve as a resource of **experiential learning** upon which new learning can be applied,
  - 3) Motivation in adults is directed to more **socially relevant** learning, and
  - 4) Adult learners have interest in immediate applications for **problem-solving**.
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# (1) Adults tend to be more self-directed as a result of their maturity.

Although medical students may seem a bit immature to you now, they really are well educated young adults and want to take responsibility for their learning.

- ▶ **Application:** Be specific in your assignments and always follow up with your learners.
- ▶ **Example:** Ask a student to find a recent journal article related to a case and make sure to review and discuss what they have found.

*Let them take ownership  
of their own learning.*



(2) Adults' personal histories provide a resource upon which new learning can be applied.

Where did your students complete their undergraduate years? Did they do other externships? Students' experiences are important because they provide context.

- ▶ **Application:** Start by asking what students already know about a topic or procedure.
- ▶ **Examples:** “What do you think is going on with this patient?” “Have you seen a case like this before?” “What do believe we should do?”

*Build on what they know.*

### (3) Motivation in adults is directed to socially relevant learning.

Adults want to know WHY they need to know something and are motivated by being recognized as competent and professional.

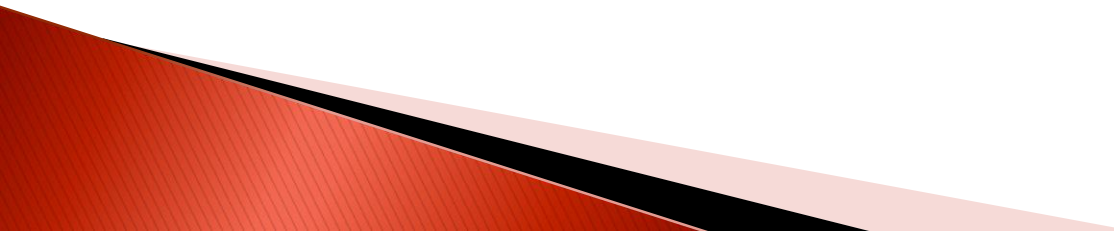
- ▶ **Application:** Pair new information with the reason WHY it is useful, and quiz on both the “what” and the “why.”
- ▶ **Example:** Now that you have received lab results, how does this change your differential diagnosis? And what would you like to do now?

*Tell them why they need to know.*



(4) Adult learners have interest in immediate applications for problem-solving.

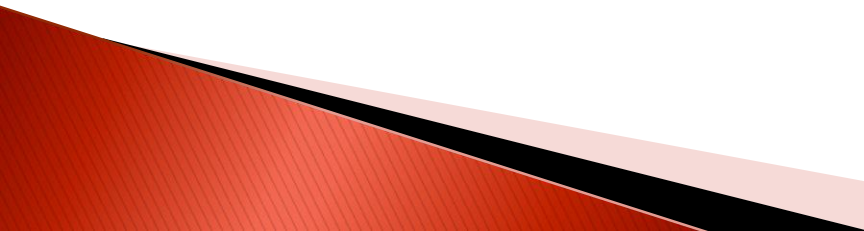
**This last assumption is tricky!**

- ▶ Because medical students are often bombarded by more information than they can process, they tend to focus on that which has immediate application.
  - ▶ That's good in the short term, but may hinder a broader thought process.
  - ▶ Make sure to present both the immediate application and the exceptions to the rule. We want well-rounded learners.
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(4) Adult learners have interest in immediate applications for problem-solving.

- ▶ **Application:** Teach actions partly in terms of long-term goals or a wider conceptual framework.
- ▶ **Example:** Besides constipation, what else could cause intermittent abdominal pain in this 7-year-old?

*Teach both the immediate answer and the exception.*



# Evaluation and Feedback

- ▶ Two major components of good teaching are evaluation and feedback.
- ▶ We are always evaluating learners' performance and providing feedback on how well they did. But they are busy (and preoccupied) and may not get your message.



# Evaluation and Feedback

- ▶ It sounds simple, but it really helps to use the word “feedback” when providing guidance...
  - *“Let me share a little feedback on how your presentation of Mr. Smith went.”*
- ▶ And, always stay constructive. Even if a learner does poorly, make your feedback constructive by ending with specific “follow-up” points to revisit.
  - *“You really packed a lot of information into that case presentation. Probably a bit too much. In the future, try to focus on the immediate complaint and we’ll begin the differential there. You’ll have another chance tomorrow, and we can discuss how you did.”*

# More about teaching and learning:

- ▶ Teaching and learning will be an ongoing theme throughout your residency program.
- ▶ In the spring of your first year, you will participate in a full-day workshop called **Residents as Teachers (RATs)**.
- ▶ RATs is designed to provide more instruction and practice with adult education techniques.

*You will have a good time and the catering is GREAT!*





# More about teaching and learning:

- ▶ In the mean time, if you are looking for more resources to help with specific education issues, contact your program's education office or the GME Medical Education Research office.
- ▶ [Karen.miller@louisville.edu](mailto:Karen.miller@louisville.edu)

# More about teaching and learning:

- ▶ And, later in your residency, if you find you are really interested in academics, you'll be glad to know that U of L offers a *Certificate in Health Professions Education*.
- ▶ The program includes four 3-credit hour graduate courses thru the College of Education and Human Development, offered right here on the Health Sciences Campus.
- ▶ Contact [karen.miller@louisville.edu](mailto:karen.miller@louisville.edu)

# References and Resources

- ▶ Ostapchuk, M., Patel, P., Miller, K.H., Ziegler, C., Greenberg, R., & Haynes, G. *Residents as Teachers: Program Evaluation of a Residents as Teachers Program*. Medical Teacher, 32(2), e49–56, Feb. 2010.
- ▶ Roberts, D., Reid, J., Conner, A., Barrer, S., Miller, K.H., and Craig Ziegler. *Implementation of a Health Literacy Curriculum for a Third Year Clerkship*. In press: Teaching and Learning in Medicine [07 17 11].
- ▶ Malcolm Knowles. <http://www.infed.org/thinkers/et-knowl.htm>
- ▶ Theories of Learning in Educational Psychology: Malcolm Knowles and the Theory of Andragogy.  
<http://www.lifecircles-inc.com/Learningtheories/knowls.html>