

Residents are Teachers, Too: Quick Tips for Effective Adult Education

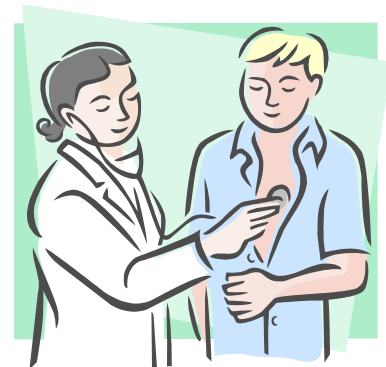
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Adult Education

- ▶ 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.¹
- ▶ And, after residency, patient education will be an important part of your career.²



Adult Education

- ▶ The good news is that you already know a great deal about successful teaching!
- ▶ Just think about 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.



Adult Education

- ▶ We all begin learning as children but we continue learning as adults.
- ▶ Interestingly enough, educators have realized that there are distinct differences between how children and adults should be taught.

Adult Education

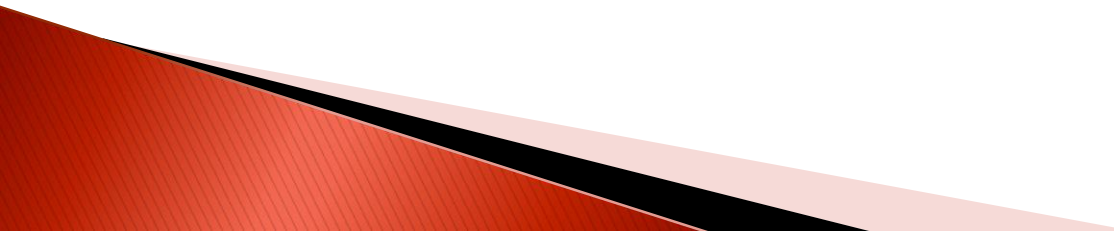
- ▶ Malcolm Knowles (1913–1997) was one of the first to explore this idea. He used the term andragogy to differentiate adult learning from pedagogy that refers to ways in which children learn.³

Resource links 

<http://www.lifecircles-inc.com/Learningtheories/knowls.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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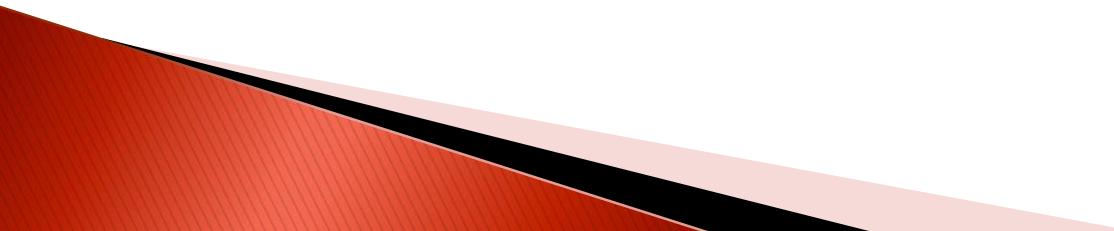
The Basic Assumptions:

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

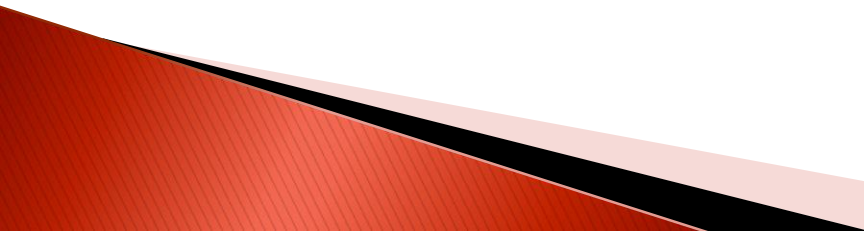
- ▶ **Application:** Pair new information with the reason WHY it is useful, and quiz on both the “what” and the “why.”
- ▶ **Example:** Now that you have received lab results, how does this change your differential diagnosis? And what would you like to do now?

Tell them why they need to know.



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

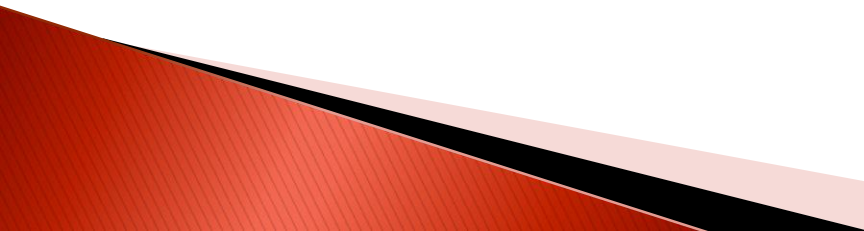
This last assumption is tricky!

- ▶ 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?

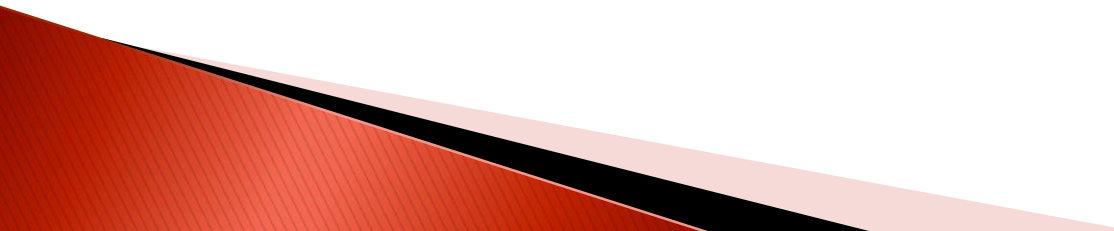
Teach both the immediate answer and the exception.



Evaluation and Feedback

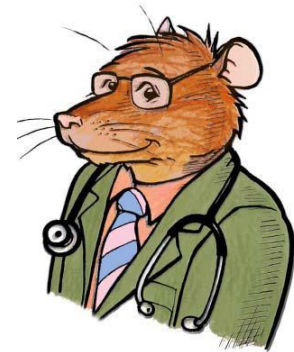
- ▶ Two major components of good teaching are evaluation and feedback.
- ▶ We are always evaluating learners' performance and providing feedback on how well they did.

Evaluation and Feedback

- ▶ Adults learners, however, are often so involved in the task that they miss the feedback. It sounds simple, but it really helps to use the word “feedback” when providing guidance.
 - ▶ And, always stay constructive. Even when a learner does poorly, make your feedback constructive by ending with specific “follow-up” points to revisit.
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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)** designed to provide more instruction and practice with adult education techniques.



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

More about teaching and learning:

- ▶ And, later in your residency, if you find you want to further specialize in health professions education, you'll be glad to know that U of L offers a *Certificate in Health Professions Education*, a series of four 3-credit hour graduate courses thru the College of Education and Human Development, offered right here on the Health Sciences Campus.
- ▶ Contact Michael.Rowland@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>