An Introduction to Pedagogy and Learning Styles

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Grand Summarizer

What IS “Pedagogy”?  
- Def:  the art, science or profession of teaching  
- Word origin: Greek word paidagogos  
  paid = child, agogos = leader (slave who took child to school)  
- Also may be defined as the exploration of effective teaching and learning strategies

What is “Andragogy”?  
- From the Greek, literally means “adult-leading”  
- Def:  the art, science, profession of teaching adults  
- Some educational researchers will use the term “andragogy” when examining postsecondary school education  
- Knowles (1973) stated adults (as opposed to children) tend to be:  
  - self-directed learners,  
  - have a vast knowledge base that can be tapped,  
  - rely on peers as resources,  
  - are motivated to learn in order to solve problems and apply what they’ve learned  
- Discuss:  do you agree with Knowles?
What are “learning styles”?  
- One definition (Sarasin): “the preference or predisposition of an individual to perceive and process information in one particular way or a combination of ways” 
- Research suggests that learning styles originate with a large genetic component – but they can change and develop throughout life 

Why should students learn about their own learning style?  
- Understanding one’s learning style is the first step in one’s own metacognition  
- Using study methods appropriate for one’s learning style may facilitate learning, rather than impede it – (there is debate about this, though!)  
- Discuss: what are your opinions about this? Do you agree?

Why should instructors learn about learning styles?  
- We tend to naturally teach in ways that are consistent with how we learn – yet we likely may not be reaching the entire audience!  
- Need to apply teaching strategies that “speak to” multiple learning styles, so all students have a chance to succeed
What are some of the learning style theories?

- Each theory has its own set of proponents (and a different set of critics)
- There is no one “true” theory – use/work with the theory(ies) that make the most sense to you.
- Here’s a sampling:

Gardner’s Theory of Multiple Intelligences

- Developed in 1983
- This theory states measuring intelligence merely by I.Q. tests is too limited
- Originally proposed multiple intelligences, which account for a broader range of potential

Multiple Int. (continued)

- According to Gardner:
  - All human beings possess all nine intelligences in varying amounts.
  - We can improve education by addressing the multiple intelligences of our students.
Multiple Intelligences

- Logical/mathematical ("number smart")
- Linguistic ("word and language smart")
- Musical (sensitivity to pitch, rhythm, tone)
- Spatial (think in 3D, perceive imagery, images – "visualizer")
- Bodily-Kinesthetic (ability to manipulate objects, fine-tune physical skills)
- Interpersonal ("people smart") interact w/others well – "socializer"
- Intrapersonal ("self smart") – good sense of self
- (Naturalist) ("nature smart" – ability to categorize plants, animals in nature)
- (Existential) (able to tackle questions like "what is the meaning of life")

What is your multiple intelligence makeup?

- Go to this website (where some of this information was pilfered) and do this interactive test
  http://www.thirteen.org/edonline/concept2class/mi/w1_interactive1.html

Neil Fleming: VARK

- V: Visual (images, flow charts, map)
- A: Aural (oral lectures, listening)
- R: Read/Write (text info, reading)
- K: Kinesthetic (hands-on activities)
- Most instructors favor those with a strong read/write preference
- Individuals may have one strong preference, be bimodal (e.g., VR, AK) or be multimodal
Variation of a theme: VAK

- Visual
- Aural
- Kinesthetic

In this scheme, the 'read/write' is grouped with visual (since for most learners, the texts are seen).

Kolb’s 4 stage cycle of learning (from which Kolb’s learning styles developed)

Yet in this process, Kolb states people tend to prefer some of these stages over others (and from this, the learning styles are categorized).

Kolb learning style theory
Kolb Learning Style theory

4 learning styles:
- **Diverging**: perceive info concretely and process it reflectively *(feeling and watching)*
  - Can view a situation from many divergent perspectives
  - Brainstorm alternatives
  - Ask "why" questions, like working in groups
  - Often found in humanities, arts, service careers

- **Assimilating**: perceive info abstractly and process it reflectively *(watching and thinking)*
  - (analytical learners)
  - Can group/organize data into a meaningful unit
  - Ask "what if" questions (what if I change this)
  - Prefer readings, lectures, traditional classrooms
  - In math, basic science, educational research

- **Converging**: perceive info abstractly and process it actively *(doing and thinking)*
  - Combine analytical thinking with doing
  - Ask "how" questions ("how does this work?")
  - Like lab work, simulations, instructor as a coach, prefer to work alone
  - In applied science, technology careers
Kolb Learning Style Theory

- Accommodating: perceive info concretely and process it actively (doing and feeling)
  - Use both interpersonal interaction with doing
  - Ask “what if” (what happens if I change this?)
  - Like to learn hands on, but prefer to work in a group
  - Marketing, sales, business management, some teachers

Which Kolb learning style best describes you?

Take home points

- Lots of learning styles – be a bit familiar with some of the major ones
- No one theory is superior over the other
- Examining relationship among learning style and student performance in class, teaching efficacy, etc. can make for good educational research projects (if designed well, of course!)