# AN INTRODUCTION TO LEARNING AND TEACHING STYLES

What are they and why do they matter?

#### INTRODUCTION

- For discussion: What was your favorite class/ worst class in high school or college? Why was that?
- What do you think is/are your own preferred style(s) of learning?
- How would you describe your preferred teaching methods?

#### INTRODUCTION

- Average number of graduate level courses on teaching methodology at the post-secondary level taken by U.S. faculty: Studies indicate that 85% of faculty have had <u>no</u> training courses!
- But, according to Derek Bok, in Our Underachieving Colleges, <u>90%</u> of college professors believe their teaching is <u>above</u> <u>average</u>!

#### LEARNING STYLES: AN OVERVIEW

- Premise #1: students learn better when they recognize their preferred learning style and can make use of a variety of strategies
- Premise #2: Faculty can enhance student learning by incorporating multiple paths to learning in their classes

# LEARNING STYLES: CAVEATS

- Learning Style theory has developed over the last 40 years, representing a shift away from behavioral learning theory in educational psychology
- Approximately 70 theories have been identified; none is complete in itself; each focuses on some aspects of learning theory to the omission of others
- These theories draw from research in psychology, education, etc. but often are more intuitive than validated by hard research

#### LEARNING STYLES: CAVEATS

- Some theories have achieved significant commercial success because of marketing efforts (but don't have consistent research validation)
- However, some generalizations based on work with these theories can be appropriated by faculty in higher education settings
- Cognitive learning theory provides more objective/researched evidence (some aspects to be presented today)

#### LEARNING STYLES--OVERVIEW

#### • We receive information through 4 primary modalities:

- Visual (what do I see?)
- Auditory (what do I hear?)
- Tactile (What can I touch?)
- Kinesthetic (What can I manipulate or move?)
- We process information through 2 primary approaches (cognitive style):
  - Abstract (objective data management)
  - Relational (personalized, connectedness)

# 1. THE FOUR MODALITIES IN THE CLASSROOM

- Visual learners = 30% of students
- Auditory learners = 25% of students
- Tactile-kinesthetic learners = 15% of students
- Mixed modalities = 30% of students

- Modality = combination of perception and memory or how the mind receives and stores information
- Visual: learner prefers images (30%)
- Auditory: learner prefers words (25%)
- Tactile/Kinesthetic: learner prefers doing, touching, physical manipulation of objects (15%)
- Mixed modalities (30%)

# FOUR MODALITIES

- Faculty should try to match their instructional approach to the learning task and if possible use multiple approaches (ex: learning tennis by listening to a lecture is not a good match—no pun intended!)
- Multimodality instruction ≠ modality matching for individual students

# FOUR MODALITIES

- Matching can help lower-ability students temporarily; mismatching can help higher-ability students (because the system already 'works' for them)
- using only modality matching eventually puts all students at a disadvantage because they need to be able to use a variety of modalities(but it can help a student who gets stuck and needs another way to perceive the information)
- Multimodality teaching = incorporating a variety of approaches that eventually connect with all styles

#### 2. COGNITIVE STYLE: FIELD SENSITIVITY

- Field sensitivity refers to the extent to which an individual uses context in order to understand and make sense of new information
- Field sensitivity is a facet of personality that is relatively stable over time
- this topic has been extensively researched and shown to have validity regarding its impact on learning

#### FIELD INDEPENDENT VS. SENSITIVE

- Autonomous learners, taskoriented, internally motivated
- Deal well with discrete items of information
- Not affected by context; impose their own structure on content
- Can perform well in large classes and on open-ended tests
- Enjoy competition

- Socialized learners, relationship-oriented, externally motivated
- Deal well with information related to 'the big picture' and/or personally meaningful
- Affected by context; require structure
- Can perform well in small, structured classes and on objective tests
- Enjoy collaboration

# COGNITIVE STYLE

- Higher education tends to favor:
  - <u>field independent</u> learners over *field sensitive* learners
  - Academic knowledge over experiential
  - <u>Verbal</u> communication over visual
  - information organized in <u>linear</u> fashion and <u>discrete point</u> presentations over information presented *holistically*
- Students who tend to be field independent learners are white European-American and Asian males; students who tend to be field sensitive include females, Native Americans, Afro-Americans and Latinos (obviously with individual differences)

#### THE EFFECTIVE TEACHER INCLUDES A <u>VARIETY</u> OF:

**Teaching Styles** 

Assessment strategies

Learning styles

#### TEACHING STYLES

- Since every individual has a preferred learning style, the teacher who depends exclusively on one preferred teaching style puts up to 75% of his/her students at a disadvantage
- Students learn better when we select <u>content</u>, <u>activities</u> and <u>assessments</u> with a variety of learners in mind

#### FOUR COMMON TEACHING STYLES :

- expert/formal authority: imparts information, concerned with correct way of doing things
- personal model: encourages students to observe then emulate instructor's approach
- Facilitator: emphasizes personal interaction with students; guides and directs students by asking questions, prompts, etc.
- Delegator: resource person; develops students as independent learners

#### BARB'S TEACHING STYLE INVENTORY:

Teaching Styles	Inventory Results
Style	0 3.5 7.0
Expert Formal Authority Personal Model Facilitator Delegator	

For my Latin American Civ/Lit course, I had these scores: **Expert** = 4.8 Formal authority = 3.7 Personal model = 3.1 **Facilitator** = 4.5 **Delegator** = 4.2 = the "delegator/facilitator/expert" cluster puts the burden of learning

on the students by emphasizing independent learning activities for groups and individuals

# THE EFFECTIVE TEACHER:

- uses a variety of modalities to deliver content
- uses a variety of instructional approaches, matching the approach to the learning task
- encourages students to be aware of their preferred learning styles and to develop flexibility (a variety of learning strategies)
- Offers a variety of assessment measures so that all students can work from their strengths at various points during the course

# FOR FURTHER READING:

- For identifying your preferred learning style: <u>http://www.vark-learn.com/english/</u> <u>page.asp?p=questionnaire</u>
- Take the Teaching Styles Inventory <u>http://fcrcweb.ftr.indstate.edu/</u> <u>tstyles3.html</u>