LEARNING AND TEACHING STYLES
Learning Objectives

- Describe learning style theory
- Identify your personal learning style
- Articulate how learning styles can dictate teaching styles
Road Map

- Introduce different models (10 min)
- Identify your learning style (15 min)
- Discuss Kolb model (5 min)
- Experience different styles of teaching (20 min)
- Applications of Learning Style theory (10 min)
- Wrap up (10 min)
Learning Style Theory

- Individuals differ in how they learn
- First popularized in the 1970’s
- Learning styles inventories are big business

- Meshing hypothesis: instruction is best when it matches the preferred style of the learner

- Evidence base for incorporating learning styles into general education practice is currently lacking

Pashler, H. Psychological Science in the Public Interest, 2008
Neil Fleming: VARK

- Visual learners
- Auditory learners
- Reading/writing learners
- Kinesthetic learners

http://www.vark-learn.com
Medical students and VARK

Uni-modal 36.1%
Bi-modal 24.5%
Tri-modal 32.1%
Quad-modal 43.4%

Lujan HL. Advances in Physiol Education, 2006
Generational Differences: Millennial Learners

- Born 1982-2000
- Technologically savvy
- Prefer structured learning experiences
- Accepting of feedback
- Do well with team work
- Open minded
- “Strong sense of self-liking”
Meyers-Briggs Personality Types

- Extroversion vs. Introversion
- Sensing vs. Intuition
- Thinking vs. Feeling
- Judging vs. Perceiving

http://www.myersbriggs.org/type-use-for-everyday-life/type-and-learning/
David Kolb: Experiential Learning Theory

2 dimensions:
- Perception (grasping)
- Processing (transforming)

Kolb, DA. Experiential Learning: experience as the source of learning and development. 1984.
What is your learning style?
Kolb's learning styles

Concrete Experience
Feeling

Reflective Observation
Watching

Active Experimentation
Doing

Converging
(think and do)
AC/AE

Processing
how we

Continuum
how we think about things

Assimilating
(think and watch)
AC/RO

Accommodating
(feel and do)
CE/AE

Perception Continuum

Abstract Conceptualisation
Thinking

Diverging
(feel and watch)
CE/RO

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Convergers
- Abstract conceptualization
- Active experimentation
- Good at practical application of ideas
- Unemotional, narrow interests

Accommodators
- Concrete experience
- Active experimentation
- Good at getting things done
- More risk taking
- Solves problems intuitively
Divergers

- Concrete experience
- Reflective observation
- Imaginative
- Good at seeing things from different perspectives, interested in people

Assimilators

- Abstract conceptualization
- Reflective observation
- Good at creating theoretical models
- Prefer abstract concepts
# Learning styles of different specialties

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Convergence</th>
<th>Divergence</th>
<th>Assimilation</th>
<th>Accommod’n</th>
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</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>16 (50)</td>
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- Wrap up (10 min)
Active Experimentation with Kolb Learning Styles
Active Experimentation with Kolb Learning Styles

- **DIVERGERS**
  - Try it out
  - Watch someone do it

- **ASSIMILATORS**
  - Read handout
  - Watch someone do it

- **CONVERGERS**
  - Read handout
  - Try it out

- **ACCOMMODATERS**
  - Try it out
  - Try it out
How can this information be used to improve your teaching?
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Kolb's learning styles

Concrete Experience (Feeling)
- Reflective Observation (Watching)
- Active Experimentation (Doing)
- Converging (think and do) AC/AE
- Diverging (feel and watch) CE/RO
- Accommodating (feel and do) CE/AE
- Assimilating (think and watch) AC/RO

Perception Continuum (how we think about things)
- Processing (think and watch) AC/RO

Abstract Conceptualisation (Thinking)
- Converging (think and do) AC/AE

Processing Continuum (how we think about things)
- Reflective Observation (Watching)
- Converging (think and do) AC/AE
- Diverging (feel and watch) CE/RO
- Accommodating (feel and do) CE/AE

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References

- Fleming, N. D. and Mills, C. E, (1992) 'Not Another Inventory, Rather a Catalyst for Reflection', To Improve the Academy, Vol. 11, p. 137.