HOW DO THEY LEARN? THE EXPERIENTIAL LEARNING PREFERENCES OF COLLEGE OF AGRICULTURE STUDENTS

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NEED FOR RESEARCH

Post-secondary students benefit from experiential learning activities in their educational programs (Kuh, ; Kolb, 2016).

Every student has different preferences for bringing in and transforming information (Sousa, 2011).
NEED FOR RESEARCH

Learning Styles

- There are many conversations about “learning styles”
- 6 common instruments for assessing learning style
  
  *(Hawk & Shah, 2007)*
NEED FOR RESEARCH

Learning Preference

- The preferred alignment for bringing in and processing information (Sousa, 2011)
Kolb proposed a method for assessing learning preference in alignment with experiential learning theory (Kolb, 1984, 2016).
THEORETICAL FRAMEWORK
PURPOSE

Describe KLSI learning preferences scores for College of Agriculture students
METHODS

Population

- Convenience sample of all students enrolled in a total of 10 agriculture courses at two separate land grant institutions between 2015 & 2018 (n = 279)
- Students represented 14 different majors & 6 academic departments
- 100% response rate (results limited to this population)
METHODS

- Descriptive survey
  - Demographic information
  - Kolb’s Learning Style Inventory
    - 12-items
      - Forced choice items with all four components
      - Previous reliability estimates between $\alpha = 0.82$ and $\alpha = 0.86$
      - Post hoc reliability for this sample between $\alpha = 0.81$ and $\alpha = 0.92$
LET’S TRY ONE TOGETHER

When I learn...

A. I get involved

B. I like to observe

C. I evaluate things

D. I like to be active
KLSI

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KLSI

- Scores 12-48 for each component
- Scores ±36 for each dimension
  - Grasping
    - Bring in knowledge
  - Transforming
    - Process knowledge
    - Through AE or RO
KLSI

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METHODS

Distribution
- Paper versions of instrument were distributed to each student enrolled in the selected classes

Analysis
- Paper versions were entered into Excel spreadsheet
- Analyzed with SPSS v 23
FINDINGS
KLSI AREA SCORES

Abstract Conceptualization- $M = 30.7(8.6)$
Concrete Experience- $M = 27.1(7.0)$
Active Experimentation- $M = 33.6(8.3)$
Reflective Observation- $M = 28.2(7.1)$
FINDINGS
STUDENT LEARNING STYLES

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FINDINGS
STUDENT LEARNING
STYLES

- Acting (n = 34)
- Imaging (n = 36)
- Initiating (n = 77)
- Experiencing (n = 50)
- Balancing (n = 20)
- Reflecting (n = 14)
- Deciding (n = 14)
- Thinking (n = 16)
- Analyzing (n = 18)
WHAT THIS MEANS FOR INSTRUCTORS

Students as a group included all learning preferences

- Instruction should include all four components of experiential learning theory
- To think about:
  - Are all four stages of ELT expressed in your current courses?
  - How can we vary instruction to include a focus on ELT?
WHAT THIS MEANS FOR INSTRUCTORS

More students preferred to bring in information through concrete experience

- This is similar to Kolb’s findings for the general population and for younger adults (18-25)

- To think about:
  - How can you increase the amount of instruction that allows for grasping through concrete experience?
  - This is backward from most traditional instruction
WHAT THIS MEANS FOR INSTRUCTORS

More students preferred to transform information through active experimentation

- Assimilation may be easier when applied to new situations
- To think about:
  - Is there enough active experimentation in course instruction and assignments to help students assimilate abstract concepts?
RECOMMENDATIONS

1. Conduct longitudinal examination to track learning preferences over time

2. Compare results with other populations

3. Examine how ELT is currently expressed in College of Agriculture courses
THANK YOU