

CRITICAL THINKING STYLES OF INTERNATIONAL FACULTY



Catherine A. DiBenedetto, Clemson University
R. Kirby Barrick, University of Florida
Mohamed Hassan, King Saud University

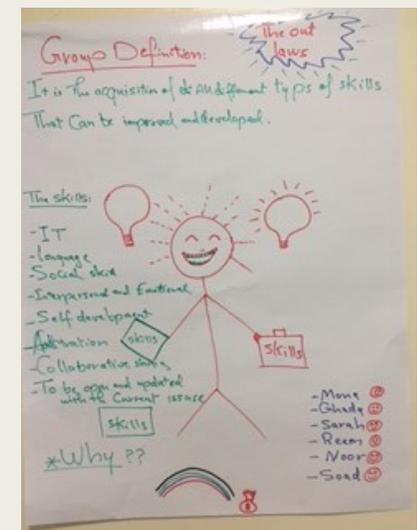
Purpose

- Enhancing Teaching and Student Learning
- 5-day intensive professional development training for faculty
- King Saud University, Riyadh, Kingdom of Saudi Arabia
- Separate Female and Male Groups
- Seminar Topics included:
 - *Creating a Course that Meets Student Needs: Start with the End in Mind*
 - *Inquiry-based Learning, Motivating and Engaging Students*
 - **Improving Student Learning (Participants engaged in Critical Thinking, UFCTI)*
 - *Utilizing a Problem Solving Approach*
 - *21st Century Teaching, Mentoring Faculty*



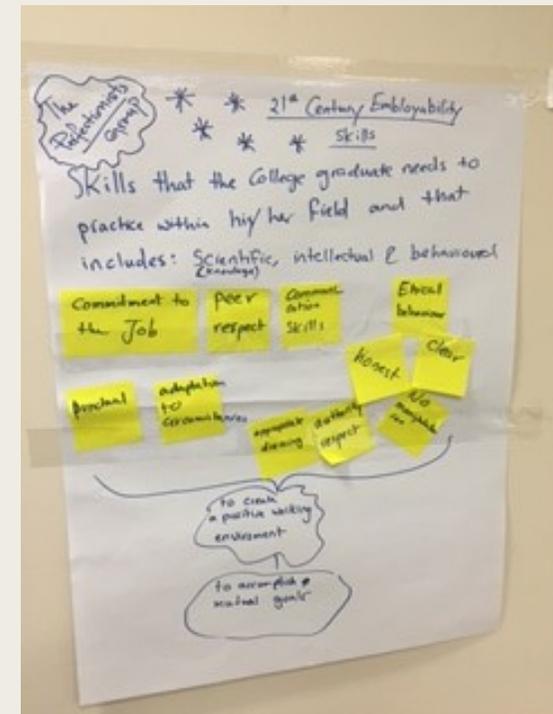
Overview

- Students need skills in the content area, in reasoning, in problem-solving, and in thinking.
- Faculty need an understanding of the importance of those skills.
- Critical thinking skills can be assessed as a “style” – not a right or wrong way to think. (Lamm & Irani, 2011)
- Faculty critical thinking style may influence teaching style.
- Students must be directed to higher levels of cognition. (Whittington, 1995)
- Instructors must address critical thinking. (Whittington, 1991)
- An important first step – faculty knowing their own critical thinking style.



Related Research

- Previous work focused on student critical thinking and relationships with teaching strategies and attributes
 - *Rollins, 1990; Cano & Martinez, 1991; Burton & Garton, 2007, Lamm, Rhoades, Irani, Roberts, Unruh-Snyder, & Brendemuhl, 2012; Burbach, Matkin, Quinn, & Searle, 2012*
- Teachers can influence their students' critical thinking
 - *Burbach, et al., 2012*
- Agriculture instructors need to provide critical thinking opportunities
 - *Burbach, et al., 2012*
- Educators need to be aware of critical thinking attributes
 - *Lamm, et al., 2012*



UF Critical Thinking Inventory

- Critical Thinking – Reasonable and reflective thinking that is purposeful and goal directed (Lamm & Irani, 2011)
- UF Critical Thinking Inventory (UFCTI)
 - *Developed and validated by researchers at University of Florida*
 - *Identifies Critical Thinking style via a 20-item inventory*
 - *Continuum: Seekers \leftrightarrow Engagers*
- Seekers: high tendency to seek information, open to others' opinions, consistently looking for new knowledge
- Engagers: anticipate situations needing good reasoning, confident in reasoning, problem-solving and decision-making skills

Methods

- UFCTI instrument administered to faculty at King Saud University, Riyadh, Saudi Arabia
 - *Participants in faculty development workshops (self-selected)*
 - *Administered separately to female and male faculty*
- 22 females and 39 males completed the inventory
- Results tabulated utilizing UFCTI guidelines
- Possible score range: 26 – 130
- Seekers: score of 78.4 and lower
- Engagers: score of 78.5 and higher



Findings

GENDER	N	SEEKER	ENGAGER
Female	22	14	8
Male	39	18	21
Total	61	32	29

Note: Possible score range: 26 – 130

Seekers: score of 78.4 and lower

Engagers: score of 78.5 and higher

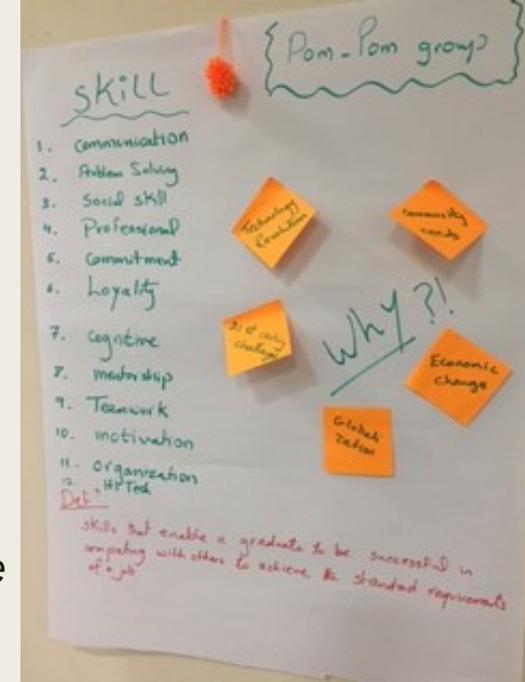


Findings

- Female faculty (n = 22)
 - Average slight tendency toward seeking style
 - Range of scores: 73.8 – 89.7
 - 64% (n = 14) indicated a **Seeking** style; 36% (n = 8) indicated an **Engaging** style
- Male faculty (n = 39)
 - Average slight tendency toward engaging style
 - Range of scores: 66.6 – 90.9
 - 54% (n = 21) indicated an **Engaging** style; 46% (n = 18) indicated a **Seeking** style

*Note: Possible score range: 26 – 130

- **Seekers:** score of 78.4 and lower
- **Engagers:** score of 78.5 and higher



Conclusions, Recommendations, and Implications

- Female and Male faculty groups were similar in their CT styles
- Overall mean scores for each group were near the dividing line between Seeking and Engaging
- Male faculty scores were more varied than female faculty scores
- The UFCTI should be utilized more broadly in the U.S. and in international settings
- U.S. educators should be aware of potentially different CT styles among faculty as they engage in international activities
- More information is needed for relationships among faculty CT style, student CT style, and teaching strategies

Questions?

Thank you!

Catherine A. DiBenedetto
Clemson University



R. Kirby Barrick
University of Florida



Mohamed Hassan
King Saud University

