Building the Pyramid: Fostering Academic Success through Non-cognitive Skills

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Introductions

• Melissa Knight, Director of Academic Coaching, Lynn University

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• Welcome to our session!
What are Cognitive Skills?

- Cognitive Skills: brain-based skills including perception, attention, memory, and processing

- Typically related to IQ and Academics
What are Non-Cognitive Skills?

- Non-cognitive skills are characteristics and traits that are not measured by academic tests, but are important to fostering academic success

- Non-cognitive skills include:
  - Motivation
  - Academic Self-Concept
  - Self-Efficacy
  - Resilience
Research

- A lack of non-cognitive skills has been associated with less desirable educational and economic outcomes in adulthood.

- Research has shown non-cognitive skills can help compensate for cognitive deficiencies related to academics (Rosen et al., 2010).

  - Motivation
  - Academic Self-Concept
  - Self-Efficacy
  - Resilience
Research continued...

- Self-efficacy can account for academic success beyond learning disabilities and delinquency (Evans, 2005)

- University Study
Research summary

• It appears as though cognitive skills and non-cognitive skills can predict academic success, but that non-cognitive skills additionally predict employment and occupational status in adulthood (Rosen et al, 2010)

• Ivy League Study
The Brain

Amygdala
- fight, flight, free
- spontaneous joy

Hippocampus
- Visual Spatial memory
- Memory in context setting
Non-cognitive Skills

• How do we develop non-cognitive skills in the following areas?:

  - Motivation
  - Academic Self-Concept
  - Self-Efficacy
  - Resilience
Motivation

Motivational Interviewing

- How to facilitate change through conversation
- A method that is strength based to support students in finding their own way for change
  - Avoid being the “fixer”
- Skills needed
  - Active listener
  - Ask powerful questions
  - Patience
Self-efficacy

- Cognitive or non-cognitive skill?
- Fostering self-efficacy
  - Performance accomplishments
  - Vicarious experience
  - Verbal persuasion
  - Physiological states

“Developing specific EF and self-determination skills will lead to an increase in self-efficacious behavior.” Goudreau & Knight, JAD
**Academic Self-concept**

- Academic self-concept is one’s self perception regarding academic performance (ex: “I am good at math”)
- Academic self-concept can significantly and positively affect academic achievement
- Research has shown that a strong academic self-concept is correlated with higher grades
Strategies for Improving Academic Self-concept

• Develop assignments and projects that encourage students to pursue their individual interests to reduce social comparison

• Provide students with performance feedback related to their improvement over time, rather than comparing class averages

• Express to students that each brings a unique set of valuable skills
Resilience

• The ability to “bounce back” from setbacks

• Ex: Failing an exam
Building Resilience: The Transactional Model

Stressful event (tough math test)

Appraisal

Threat ("Yikes! This is beyond me!")

Challenge ("I've got to apply all I know")

Response

Panic, freeze up

Aroused, focused
Group Activity

• Break into groups of 4

• Group 1: Motivation
• Group 2: Self-concept
• Group 3: Self-efficacy
• Group 4: Resilience

• Write down what you can do in your daily practice to foster academic success in the assigned area
Q/A

• Thank You!
Reference


- Rosen (book/print out)