GUIDING LIGHTS: RESEARCH-BASED PRINCIPLES FOR SMART TEACHING CAN UNDERGIRD ACCREDITATION COUNCIL FOR EDUCATION IN NUTRITION AND DIETETICS'S TIPS FOR STRATEGIES TO IMPROVE REGISTRATION EXAM PASS RATES

Terra L. Smith, PhD, RDN,
The University of Memphis,
Memphis, Tennessee
and
Loveday E. Nwobilor, PhD, RDN, LDN,
Shelby Residential and Vocational Services,
Memphis, Tennessee

Abstract

The Accreditation Council for Education in Nutrition and Dietetics' (ACEND) letter of response to subpar CDR-exam pass rates requires acknowledgement by university administration. Guidance to both program directors and faculty is available in ACEND's Tip Sheet, *Strategies to Improve Registration Exam Pass Rate*. The *Tips* recommendations "to improve a program's registration exam pass rate" can be strengthened and supported, justified and clarified when viewed through the lens of evidence-based teaching and learning research. The purpose of this scholarship is to consider the likelihood that a particular *Tip* engages the *7 Research-Based Principles for Smart Teaching* as presented by Ambrose and colleagues in the text, *How Learning Works* (2010). Each Tip was rated separately by two dietetics professionals on a 3-point Likert scale on the relationship of the statement with key aspects of each principle. Nine *Tips* across 3 of the 7 principles were rated as likely and 3 *Tips* in relation to one principle were rated as unlikely to engage the key aspects of a particular principle. Most of the *Tips* either were rated as neutral, neither likely or unlikely to engage a principle, or there was disagreement about the nature of the likelihood. Nevertheless, these results are extremely encouraging because with careful consideration the principles for smart teaching when constructing a teaching and learning strategy could intentionally engage of key aspects of a research-based principle. The work brings forward the possibility of undergirding the ACEND *Tips* with evidence-based smart teaching principles

Overview

- Introduction and Purpose
- Background and Methods
- Results and Discussion
- Recommendations and Helpful Resources
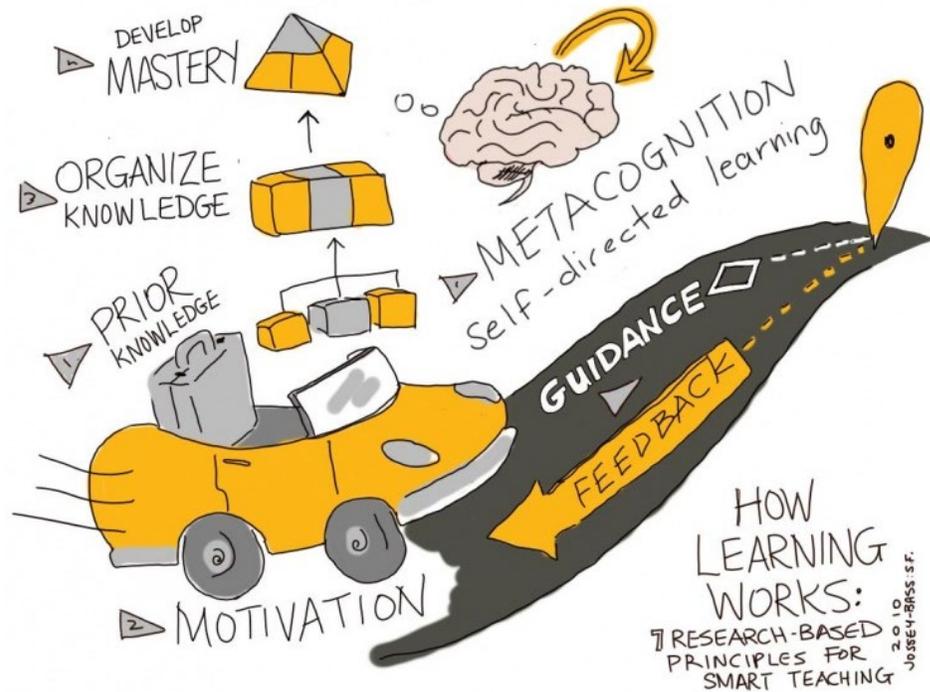
Introduction and Purpose

Introduction and Purpose

- Strategies to Improve Registration Exam Pass Rate is an on-going concern for academic programs.

- Evidence-based learning principles can help us think about strategies for improving registration exam pass rates
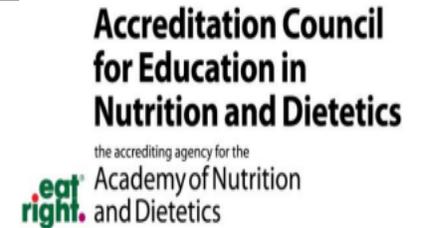
Background and Methods

Rate the relationship of the statement with key aspects of the principle: 1=Unlikely; 2=Neutral; 3=Likely

Strategies to Improve Registration Exam Pass Rate

Accreditation Council for Education in Nutrition and Dietetics

the accrediting agency for the Academy of Nutrition and Dietetics

This "Tips Sheet" was developed to provide program directors of ACEND-accredited programs guidance on strategies to improve a program's registration exam pass rate. These strategies were compiled from pass rate improvement plans that received positive feedback. Please note, these suggested strategies may not be applicable to all programs or program types.

Admission Requirements:

- Implement admissions process and criteria that incorporates more competitive admissions criteria; for example, setting minimum GPA requirements, ACT or SAT score requirements
- Implement formal application process that includes interviews to further evaluate applicants
- Add a requirement of specified service-learning hours prior to admission
- Implement a more rigorous early detection process for those students who are not successful in the program.

Rate as 1=Unlikely or 2= Neutral or 3= Likely the relationship of the Tip with key aspects of the Learning principle.

Seven Learning Principles

1. **Prior knowledge**
2. **Organize knowledge**
3. **Motivation**
4. **Mastery**
5. **Practice /feedback**
6. **Development/climate**
7. **Self-directed learners**

Categories of Tips or Strategies

1.0 Admission Requirements (4 Tips)

2.0 Program Curriculum (9 Tips)

3.0 Teaching and Learning Methods (5 Tips)

4.0 Faculty and Preceptors (3 Tips)

5.0 Academic/Student Supports Services Counseling (6 Tips)

6.0 Educational Resources (4 Tips)

Results and Discussion

Results and Discussion

LIKELY

- Principle 1: Prior Knowledge
  - Admissions Requirements
  - Program Curriculum
- Principle 5: Goal-directed Practice
  - Academic/Student Support Services Counseling
- Principle 7: Self-directed Learners
  - Admission Requirements
  - Program Curriculum
  - Teaching

UNLIKELY

- Principle 1: Prior Knowledge
  - Teaching and Learning Methods
  - Academic/Student Support Services Counseling

THE UNIVERSITY OF MEMPHIS.

Nine *Tips* across 3 of the 7 learning principles were rated as *likely* to be related to key aspects of the particular learning principle:

Principle 1: These tips are closely related to student prior knowledge and summative assessment.
Tip 1.1-More competitive admission criteria
Tip1.3-Service learning
Tip 1.4-Rigorous early detection process
Tip 2.3-Increase courses or time on topics students struggle with

Principle 5: These tips help to organize formative feedback by others outside of the course or program.
Tip 5.3-Peer tutors
Tip 5.6-Challenged by taking multiple choice tests

Principle 7: These tips promote assessments, especially formative, by self and by others.
Tip 1.3-Service-Learning
Tip 2.2-Field practicum
Tip 3.5-Portifolio

Three _Tips_ within one Principle was rated _unlikely_ to be relate to key aspects to that particular principle:

Principle 1: These tips must be facilitated by others and are based on technical solutions.

Tip 3.1- Practice CDR style test questions

Tip 3.2-No back tracking

Tip 5.4-One-on-one meeting

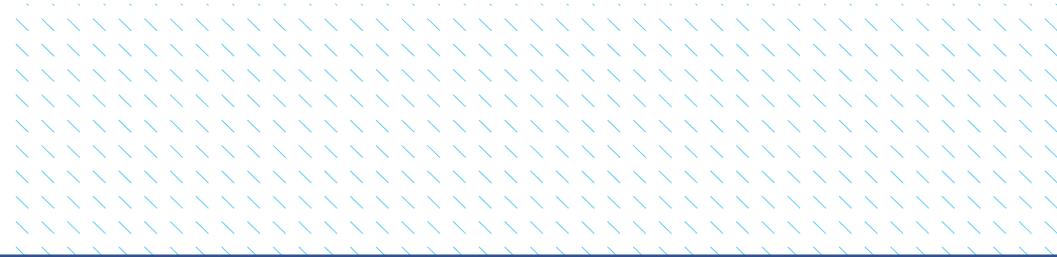# Recommendations and Helpful Resources

Recommendations and Helpful Resources

Recommendations

- **These learning principles are lens through which to review the *Tips.***

- **The lens through which a Tip is viewed can help to foster deeper thinking about how to help students learn.**

Helpful Resources

- Lang, J. M. (2021). Small teaching: Everyday lessons from the science of learning, 2nd edition.

- *How Learning Works* (2010) (https://firstliteracy.org/wp-content/uploads/2015/07/How-Learning-Works.pdf.