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

<table>
<thead>
<tr>
<th>Seven Learning Principles</th>
<th>Categories of Tips or Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prior knowledge</td>
<td>1.0 Admission Requirements (4 Tips)</td>
</tr>
<tr>
<td>2. Organize knowledge</td>
<td>2.0 Program Curriculum (9 Tips)</td>
</tr>
<tr>
<td>3. Motivation</td>
<td>3.0 Teaching and Learning Methods (5 Tips)</td>
</tr>
<tr>
<td>4. Mastery</td>
<td>4.0 Faculty and Preceptors (3 Tips)</td>
</tr>
<tr>
<td>5. Practice /feedback</td>
<td>5.0 Academic/Student Supports Services Counseling (6 Tips)</td>
</tr>
<tr>
<td>6. Development/climate</td>
<td>6.0 Educational Resources (4 Tips)</td>
</tr>
<tr>
<td>7. Self-directed learners</td>
<td></td>
</tr>
</tbody>
</table>
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
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
- Tip 1.3-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