### Application of Research-Based Principles for Smart Teaching

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# Seven Research-Based Teaching Principles for NP Students

#### 1. Students' prior knowledge can help or hinder learning.

Assess NP students current understanding at BEGINNING.....First class, anonymous notecards, read to the class. What do you know about clinical practice guidelines? What are 2 facts/2 myths about clinical practice guidelines?

### 2. How students organize knowledge, influences how they learn and apply what they know.

Gaining knowledge is insufficient. How do ideas/concepts connect?...Evidence based table for a practice setting decision in a format, length that will actually be used. Requires NP students to select, link & synthesize information to be read by practitioners from multiple sources and guidelines. UW DNP Toolkit http://hsl.uw.edu/toolkits/dnp

### 3. Student's motivation determines, directs, and sustains what they do to learn.

Relevance to professional/personal life, beyond clinical case studies....Students form a 'search committee' to hire a new NP graduate. Create questions to assess candidate beyond 'obvious questions', e.g. anger in workplace, safety of a new NP. Products will be used in their own interviews.

# 4. To develop mastery, students must acquire component skills, practice integrating them, and know when to apply what they have learned.

'Flipping the classroom' to maximize practice time, emphasize in-person class as a practicum, low stakes practice. Use small groups to practice using a specific tool (or questions) to appraise clinical practice guidelines.

## 5. Goal-directed practice coupled with targeted feedback enhances the quality of students' learning.

Use 'Fishbowl' groups in class to have NP students argue for different methods (quasi-experimental, observational) of collecting evidence to solve a specific problem as they would in their clinic setting. Other students observe and learn approaches to argument.

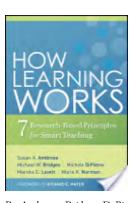
# 6. Students' current level of development interacts with the social, emotional, and intellectual climate of the course to impact learning.

Make uncertainty safe at beginning. Small groups wrap-ups—each student asks for an explanation from a peer to answer a question/confusion and operate as a 'support group.' Use lighten-up breaks in class, clickers can have students evaluate the quality of a course related picture, cartoon, or audiovisual. Students can make a pictorial about course content.

## 7. To become self-directed learners, students must learn to monitor and adjust their approaches to learning.

Help students develop the metacognitive skills needed to succeed in graduate studies such as: assess the task at hand, evaluate one's own strengths and weaknesses, plan monitor performance along the way, and reflect on one's overall success.

Accountability at end of each class for effective and ineffective approaches they used to learn course content past 1-2 weeks. Notecards, butcher paper in classroom, in class website posts to display 'best practices' to learn course content.



"Learning results from what the student does and thinks and only from what the student does and thinks. (emphasis added) The teacher can advance learning only by influencing what the student does to learn." (Simon, 2001)

#### **Evidence Based Teaching:**

We as educators must understand how learning works and translate that understanding into our teaching.

By Ambrose, Bridges, DePietro, Lovett, Norman, & Mayer (2010)



### Effective practice includes:

"...focusing on a specific goal or criterion for performance, targeting an appropriate level of challenge relative to students' current performance, and being of sufficient quantity and frequency so students' skills and knowledge have time to develop."

#### Effective feedback includes:

"...communicates to students where they are relative to the stated goals and what they need to do to improve and provides this information to students when they can make the most of it."