POWERFUL TEACHING TO IMPROVE UNDERSTANDING AND PERFORMANCE

GOALS

1. Recognize the significant role of teaching.
2. Appreciate the definition of teaching as it relates to power.
3. Know the methods of teaching that emit a powerful teaching process.
4. Determine effective methods that most often result in successful testing outcomes.

KEYWORDS FOR APPLICATION

1. Teaching Power
2. Teaching Skill
3. Incremental Exams
4. Final Exams
5. Bloom's Taxonomy
6. Cognitive Domain
7. Psychomotor Domain
8. Affective Domain
9. Syllabus/Course Outline
10. Objectives
11. Nursing Process
12. Job Description
13. Testing
14. Multiple Choice Questions
15. Clicker Reinforcement
16. Operant Conditioning
17. Leadership
18. Teaching Support
19. PowerPoint
20. Critical Thinking
21. Nurse Administrator (DON)
22. Nurse Leader (RN)

THIS DOCUMENT IS BASED ON BENJAMIN BLOOM'S TAXONOMY AND DOMAINS. IT IS RECOMMENDED THAT YOU, AS THE READER, HAVE ACCESS TO A PRINTED COPY OF ALL THREE DOMAINS OR HAVE EASY ACCESS TO ALL THREE DOMAINS ONLINE.

Academically, if the student didn't learn—where do we place the blame? Did the student just not learn, or did the teacher fail to use powerful teaching? If the student learns, to what extent is the teacher credited for powerful teaching?

Clinically, all nurse leaders (RNs) teach as an independent function of nursing!

Why Nurses Teach---

One day, a nursing student was overheard to say--- "When a nurse cannot DO nursing, a nurse TEACHES nursing." As an author my thought was: So-called "doing" nursing is important!---However, to know **WHY YOU DO WHAT YOU DO, AS A NURSE, IS DEVINE!** *THANK YOU, TEACHERS!!!*

DEFINITION OF TEACHING POWER

The definition of teaching or instruction is that there is an imparting of skill or knowledge. The teacher is the example of wisdom relative to the course content. More importantly, the teacher is the human conduit through which the means, information, testing, and support occurs during the learning process. Beyond the imparting of knowledge and the entire learning process, the teaching process is responsible for the significant way learning occurs and determines the degree of adequate understanding by students. The teacher has the *power* to excite learning or discourage the desire to learn. What more excellent gift can a person give to another than the gift of skill and knowledge that could change, for the better, the world in which we live?

The definition of the word power is a noun or a verb. This document refers to the description (not a verb) of power as a noun—meaning a teacher. The teacher can influence another person's behavior and intellectual understanding positively through the power of teaching. Power in education comes when a teacher recognizes knowledge and practice that is less than ideal and teaches to change understanding for the better. Instruction will exercise measures to pursue educational and process excellence. It sometimes requires teaching that is "thinking out of the box." Exemplary behavior by a teacher results in positive student outcomes.

Why is *power in teaching* relevant? Without positive teaching, power mediocrity exists and recognition for excellence wanes. With it (power), a student's success and teacher excellence surpass moderate expectations. It (power) is essential because, without this positive catalyst for change, advances in science and human relationships would never occur.

THE HOW-TO OF TEACHING POWER

The success related to the imparting of information comes when the teacher reveals the understanding and application of the intended skill or knowledge. For example, the degree of the comprehensive understanding can usually be preliminarily tested in the classroom by discussion and examples (by the students) regarding the potential application of content. Substantiation of knowledge occurs through a form of testing.

Testing by incremental or final written exams determines the proper cognitive understanding of skills or knowledge. State Board exams assess intellectual/cognitive understanding of safe practice concepts by providing a choice of answers in a multiple-choice setting. The psychomotor application is in a laboratory situation. Demonstration of principles and procedures demonstrate the coordination of cognitive knowledge and related psychomotor skills. The affective (attitudinal) domain is tested by an appropriate enthusiasm and attitude regarding the application technique. No matter the testing procedure, the outcome is expected to be useful in the testing of Benjamin Bloom's domains of intellectual/cognitive, psychomotor, and affective (attitudes) domains.

The choice of testing the final ability of the retention and use of information and psychomotor skill is a unique experience for each student. All students have a personal propensity for learning and a variety of different ways to apply knowledge. Therefore, there is a need for all teachers to ascertain the learning capabilities of each student. Recognizing the uniqueness of each student is the profound calling of the Art of Teaching.

The challenge, then, is to teach in many ways and *repeat, again, in different situations as needed* to pass exams to the point of student competence.

THE T-E-A-C-H OF TEACHING

Using the acronym "TEACH," let us look more closely at the many facets of learning skill and knowledge.

T: **Tell** information about skills or the knowledge to be retained. Start with stating information that is already known and move slowly and methodically toward information that is related and unknown, but built upon the proceeding information. Students learn best by learning incrementally and learning the natural movement and building on the knowledge of previously learned concepts.

E: Explore how, why, and when certain concepts are applied to "real" life situations. Require students to relate concepts to real situations. Direct a class discussion on examples as well as non-examples related to a skill or knowledge. Active participation in exploratory-thinking exercises solidifies understanding by the student. Inaccurate perceptions once identified, are replaced with accurate concepts.

A: Approve positive and accurate comments that relate to the understanding and application of what you have been teaching. Everybody loves to be right. Admonish every student for correctly understanding and applying skills and knowledge. Use the word "yes" and nod "yes" frequently as correct comments occur during a discussion. Affirmation encourages an increase in student positive behavior/responses. What student doesn't like positive reinforcement for learning?

C: Create using the skills and knowledge given. In some classes, this might require students to respond verbally, write papers, do artwork, present dramas, do pantomimes, develop test questions, do classroom presentations, etc. Nevertheless, having to create encourages the application of learned principles. An example would be to have nursing students develop multiple test questions and develop possible answers similar to what they might see on state board exams.

H: Honor successful learning of knowledge and skills by providing appropriate letter grades, verbal classroom admonition, or recognizing outstanding acquisition of knowledge or expertise as an example of successful course/content application or course goal attainment.

PREPARING SYLLABUS/COURSE CATEGORIES & COLUMNS

Syllabus/Course Introduction---

The syllabus of the learning and instruction process is prepared horizontally on a regular-sized sheet of paper (8.5 X 11) turned crosswise/sidewise. An area at the top of the syllabus/course outline provides general information about the course of study. (e.g., School/College Name, Course Name, Quarter/Semester, Room Number, Teacher's Name, Teaching Process, and the Terminal Course Goal.)

Syllabus/Course Date in Column One---

Dates are the month, day, and year of the scheduled class time in which the objective (in the second column) is to be presented in class. The dates are listed vertically in the first column.

Syllabus/Course Objectives in Column Two---

Objectives are incremental learning processes that will ultimately lead to the terminal goal stated in the syllabus/course introduction.

1. Identify the audience (student, learner, participant, etc.)
   (e.g. The student will_____)
2. Identify the behavior verb that best represents the behavior expected. Select the appropriate domain-- cognitive (intellect), psychomotor (skill), or Affective (attitude). Select the degree of verb difficulty in the domain desired/selected from Benjamin Bloom's Taxonomy.
3. Identify the situation or condition.
4. Identify the degree of mastery or change. (Note that some objectives require a minimal expectation.)

   e.g., The learner will perform a dressing change procedure according to protocol.
       The student will identify at least three causes of infection.

Write objective(s) in the second vertical column to the right of the date column. Consider the domain (cognitive, psychomotor, affective) and the verb used as a part of the selected domain. The verb chosen is the first word at the beginning of each objective. (e.g., Doing, Take, State, and List are simple verbs. Evaluate, Synthesize, Develop, and Compare are more complex verbs.) At the beginning of a course, use simple verbs as the first word at the beginning of each objective---using more complex verbs as the syllabus progresses. (See verb examples online in each domain under the title of "Benjamin Bloom's Taxonomy.")

Syllabus/Course Domains in Column Three---

Write Benjamin Bloom's Taxonomy Domain(s) of choice in the third vertical column. Relate each domain to the objective stated in the second vertical column. The "cognitive" domain is intellectual learning. The "psychomotor" domain is putting intellectual knowledge into action. The "affective" domain is attitudes and feelings.

Syllabus/Course Reading Prep Requirements in Column Four---

Write <u>expected/required</u> reading from texts, online resources, library holdings, current articles, nursing periodicals, etc. in the fourth vertical column.   Relate each reading requirement to the objective, as written in the vertical column two. Testing includes information from these resources.

Syllabus/Course Other Resources in Column Five---

Write optional/non-required readings of possible student interest related to the objectives in the vertical column two. Testing does not include information from these optional resources.

Syllabus/Course Testing Date & Process in Column Six---

Write the specific date, location, and process for testing the attainment of the objective(s) in column two.

<u>**EXAMPLE**</u>

BEST WAY COLLEGE
COURSE 900 – NURSE PROCESS (NP)—WINTER QUARTER--2014
ROOM 230—LECTURE & LAB
DR. SOMEBODY
GOAL: EFFECTIVE APPLICATION OF THE NURSING PROCESS (NP)

Date	Objectives	Domain(s)	Reading Prep	Other Resources	Testing Date &Process
Jan. 10	State NP	Cognitive	Text I Chp. 3	Nursing Pub. Pg. 5	Jan. 17-In-Class- MC
Jan. 11	Perform NP	Psychomotor	Library Reserve	Lab Video – NP	Jan. 21-Lab Pass-off
Jan. 11	Value NP	Affective	Text IV Chp. 4	ANC – Vol. 3	Jan. 22-Class-Discussion

<u>The faculty are encouraged to use a consistent syllabus/course format for every course. The same syllabi formats throughout the entire nursing program support visual evidence of the whole program's educational progressive intent.</u>

DETERMINING LEARNING THROUGH REPEAT TESTING

Every learning situation allows (according to the case) a determination of giving a test ONCE OR MORE THAN ONCE. Some teachers say, "I just want to make sure my students learn the content I have tried to teach them." Some teachers provide U-Tube reiteration of the content to meet repetitive learning needs.

Some teachers will test once and use that one test score to determine the outcome for a student's grade. Other teachers will have a student *retake* a test, again, within a given time using different situations/questions to represent the learning of the same content. In many cases, the retaking of a restructured test (not exact) that rechecks the understanding of the skill or knowledge will allow for the solidification, repetitive, and successful practice of concepts. A second chance at successful testing might be the opportunity for the student to succeed. Repeated testing of similar material allows for clarification of principles that, perhaps, were not fully understood.

Passing a test is satisfying to the ego. There is absolute truth in the fact that students learn differently and at different rates. All students are unique, and they have extenuating circumstances in life that help or hinder learning or success at a given point in time. Responding to the uniqueness of each student shows a real understanding of the accepting of human differences. Teachers, when possible, are to teach as well as make successful learning experiences for every student.

Repetitive testing is not the answer to all testing situations; however, it has worked successfully for many teachers who teach absolute concepts (complete and non-restrictive) rather than creative thinking courses. One example is the teaching of math where the answer is right or wrong—and even, perhaps, when the proof of getting the correct answer means following a specific course of constructs. This repetitive concept of testing would probably not apply to the teaching of creative thought or other creative endeavors--because creative outcomes are often in the eye-of-the-beholder.

DETERMINING LEARNING THROUGH MULTIPLE CHOICE (MC) QUESTIONS

A challenge for most teachers is accurately *writing* MC questions. Knowing the theory of writing such a question(s) is essential.

Multiple Choice (MC) questions are often used incrementally during and terminally after a course of study. Perhaps the most obvious use is for accreditation, certification, receiving a diploma, and registration.

When writing MC questions, preceding directions guide a student as to the correct answer. The preceding test directions could request the right answer, the best answer/solution, or any other pre-requisite information.

Knowing the MC question format is the first step toward being able to prepare student nurses to successfully pass a nursing state board exam on their *first attempt*. Unfortunately, some nursing students have little to no education *during* their nursing courses on how to <u>write</u> MC questions; therefore, teachers dismiss the learning as to how questions are written and how to select the required answer. Consequently, too many student nurses do not pass their state nursing board exams the first time! In the critical thinking mode of nursing education, it helps student nurses to understand the MC

question process of writing MC questions. The most successful way for students to learn the secret to passing MC questions is actually to practice the process frequently during nursing courses. Discuss MC test question(s) in class and what and why a particular answer is the answer of choice. The nursing student's ability to develop questions and verbally support the accuracy of their chosen answers could be a part of every classroom learning process.

DETERMINING LEARNING SKILL MASTERY THROUGH CLICKER REINFORCEMENT

One of the significant learning experiences for nursing students in the laboratory is the pass-off of nursing psychomotor skills. The expected outcome of the laboratory pass-off is the evidence of specific skill mastery.

In the teaching of orthopedic surgeons (as one example), student surgeons verbally state each movement of their hand(s) while performing an exact procedure/process of tying a surgical knot. While verbally talking about their correct psychomotor behavior, the correct verbal and related psychomotor activity is reinforced by clicking a hand-held clicker. The clicker reinforces each positive verbal and related move exhibited by the student during the procedure/process.

The process of clicker reinforcement (used when training many animals) is, also, very successful in teaching student nurses to perform any specific and required task accurately. To understand this process, the leader must understand the teaching concept of Operant Conditioning.

Operant Conditioning: The process involves a reinforcer that increases the probability of the desired response. In this case, a clicker is used by the instructor to reinforce acceptable/positive behavior on the part of the student nurse attempting to pass-off a nursing skill in the presence of another expert person (teacher). Some examples of psychomotor skills are urinary catheterization, intravenous access, tracheal intubation, etc.

Teach the expected and exact procedure to students. The procedure steps are precise. The specificity of a procedure is presented to each student to meet the instructional needs of the student. Some students need more explicit instruction than others. There are times when a procedure is timed-out to present more specific steps in the procedure. When the student performs each step of the procedure, the student verbalizes the step being performed. This particular teaching process is a very effective way to promote best-practice accurate psychomotor skills.

Clicker Procedure---

1. As a nursing instructor, teach the desired specific technique that will accomplish the needed task/procedure to be performed by the student. The more complicated the process, the more precise the instruction!
2. During the pass-off, do not talk to the student.
3. Inform the student to *verbally repeat the specific technique procedure* as was previously taught to him/her while performing the psychomotor task/procedure.
4. Use the clicker by clicking once to confirm each accurate verbal statement followed by the completion of each correct move.

Students are usually accepting of an instructor verbally directing, responding to moves, and positively or negatively commenting on their movements of successful or unsuccessful attempts of psychomotor skills. However, this technique removes the psychological need of the student to have verbal accolades or comparative statements between students about an instructor's approval or disapproval of their success. It also encourages more concentration by the student on the performance of a psychomotor skill.

A student verbally repeating the exact steps and being reinforced positively for each successful step through clicks (rather than a verbal statement) does not interfere with student concentration on completing a psychomotor skill. Nursing instructor verbal interruptions require a student to interrupt their thinking process more than just hearing positive reinforcement.

Let us suppose you are in a situation where a student is performing a skill directly on an actual patient. Of course, the student would <u>not</u> verbally repeat out-loud the exact progression of the procedure. However, the student recalls the steps in his/her mind. A clicker (due to the sound) is not the best choice for non-verbal reinforcement by the instructor.

As an alternative, use a small flashlight and flash it near or on the site as the student performs a skill correctly. Instead, a slight touch of a student's arm is used to affirm correct student psychomotor moves. No words are needed that make a patient nervous. The student has been told and knows the meaning of the flash of light or the slight touch of an arm. The student is comforted to know when a procedure is progressing correctly.

TEACHING LEADERSHIP

Recently, this author was reviewing teaching online opportunities at an ivy league university on the east coast. The course, resulting in a "Leadership Certificate," was an online course about two weeks long requiring student involvement about 5-6 hours per week—they said. It included relatively short times of group-sharing online sessions with all students and some brief responses from hired leadership faculty. No course development is needed by the faculty, as courses are designed by someone else. The teaching requirement was just to support students as they worked through the pre-determined course.

I share that concept with you, as a teacher, because there are some essential teaching concerns.

1. Leadership is a <u>very complex subject</u> with numerous behavioral considerations that need ongoing discussion, understanding, and possible reconsideration.
2. Contemplation and application of theoretical and proven concepts must be understood, applied, taught, and evaluated as to their relevance, use, and ultimate success in specific situations.
3. Evaluation occurs as to the success of the application—again and again. The continual review of progress resulting in possible leadership changes is a teaching and student challenge.
4. Learning about leadership concepts takes time.
5. A "Certificate in Leadership" should indicate the knowledge and successful application of the complexities of leadership behaviors. Maybe this stated course best meets the criteria of "Introduction to Leadership?"

If you choose to offer a similar course, be prepared to cover many decision-making concerns, rules, and known theories related to the leadership role. Use a critical thinking group or individual thinking process to assess leadership needs, plan for change(s), implement techniques, and evaluation of leadership practice. Be prepared to assist learners with creative personal and facility/organizational challenges you, as a teacher, have never known or had to face.

It will take longer than a 2-week course to teach the concepts and theories of leadership—not considering, even, the application of concepts and methods! Use the many ideas and techniques presented by this author to help offer a quality teaching experience for nursing students regarding the necessary understanding and processes related to successful leadership. The documents by this author offer readings to support teaching concepts.

The culmination of a leadership course (ideally) is for students to know a resource in the future to answer their leadership questions. Not surprising—the teacher, too, continues to learn from listening to new leaders and helping to problem-solve the many challenges of working with people and regulations!

TEACHING SUPPORT

There is no secret about the increase of learning through visual stimulation. Enhance learning by using a picture, graph, map, format (e.g., PowerPoint), chalkboard renditions, video, or computer. It provides a different look/perspective of the information. Studies have shown that it increases memory as an outcome of increased interest. It helps to clarify the message. The spoken word and a visual image of the information strengthen understanding.

PowerPoint visuals enhance meaningful note-taking by the student. PowerPoint visuals emphasize the information to be retained to meet a course goal and pass tests.

There is a question about whether a teacher should remain at the front of the class to teach. The adage of "It All Depends" comes to mind. If you are teaching/lecturing and need control of a device for changing visuals or if you need to write on the board, of course, you need to be at the front of the room. However, if the teaching is encouraging participation in creative thinking and problem solving relative to concepts, walking around the room between students promotes teacher involvement in the process of thinking and consistent application of principles. It often requires students to "free" themselves from taking notes and turning physically toward the instructor or other verbally responding students. The interest and participation between the entire room can become "electrified" by collective thought and sharing of ideas not imposed by a front-of-the-room lecturing teacher.

There is a picture associated with content at the beginning of many documents written by this author. Place the image on an overhead projector at the beginning of the lecture. Just for fun, cut cartoons from newspapers that represent related humor about the content. An overhead cartoon projection during the break-time is a fun "ice-breaker." (Copying a cartoon is unacceptable due to copyright laws)

Taking nursing students to the actual patient care site where the culmination of classroom teaching occurs is probably the most profound way to teach. Student nurses go to clinical areas to experience the "hands-on/practical" information they have learned in class and practice labs. This method tests a student's ability to transfer information to performance.

Guess you wonder about the picture-----One student nurse at a college in Wyoming asked me why I gave her such a difficult patient for her clinical practice. I told her that I knew she could do it, that I trusted her ability, and I am here when she needs help. At the end of the course, she came to my office and stated she was impressed with my trust in her. She had taken a picture of a mare and new colt, and she gave it to me as a gift. "Here, she said, this picture represents you, the teacher (mare), and me, a nursing student (colt) just beginning to learn about the world of nursing." Her kindness and ability to relate to this picture was touching!

The ultimate challenge of teaching and student nurse learning meet at the crossroads of the patient's side. What a challenge for both the teacher and the student!

TEACHING THOUGHT

Critical thinking is the heart of learning. It questions nursing concepts and gets to the intended message. Critical thinking examines assumptions, logical processes, and encourages deeper understanding through a rational process. It, also, helps a student to distinguish between relevant and irrelevant information through an intellectual struggle.

Five Consecutive Steps to Effective Critical Thinking---

1. Identify the problem (problem-solving).
2. Think about the problem through an analysis of the facts.
3. Determine the possible solution/resolution.
4. Make a judgment about the problem and resolution.
5. Evaluate the outcome for future reference.

Excellence in teaching student nurses require a student to intellectually struggle to more fully comprehend and apply the successful concepts of nursing.

CRITICAL THINKING QUESTIONS

1. What is your definition of teaching power?
2. What difference do you intend/expect to make due to your teaching power?
3. What are the three domains of learning set forth by Bloom's Taxonomy?
4. What is the difference in writing course objectives and writing job descriptions?
5. What are some personal teaching ideas you would use to help a student apply taught principles, concepts, and skills?
6. What is Operant Conditioning, and how could this concept be creatively used in a teaching process?
7. Who is the teacher in a specified nurse setting?
8. How do you know a student has learned?

RECOMMENDED READING

Understanding Test Preparation and Application by this author

www.teach thought. com (Included are 28 critical thinking question stems for any content area)

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