The Center for Teaching and Learning

Teaching Matters

IN THIS ISSUE

1 NEW DIRECTOR FOR THE CENTER FOR TEACHING AND LEARNING

2 AUGUST THEME: WHAT MAKES AN EFFECTIVE TEACHER?

3 GOOD TEACHING: THE TOP TEN REQUIREMENTS

5 STACK THE DECK IN FAVOR OF YOUR STUDENTS BY USING THE FOUR ACES OF EFFECTIVE TEACHING

12 FIGURE 1. THE FOUR ACES OF EFFECTIVE TEACHING

13 FIGURE 2. ADVANCE ORGANIZER FOR STATISTICS

NEW DIRECTOR OF THE CENTER FOR TEACHING AND LEARNING

By Dr. Gery Hochanadel and Dr. William Ritchie

Dr. Chris Stabile has joined the Keiser Collegiate System as the new Director of the Center for Teaching and Learning. Dr. Stabile comes to us with 10 years of teaching and curriculum development experience, having taught and conducted research on various teaching concerns such as critical thinking, instructional design, and professional development. As a teacher, Dr. Stabile’s main focus has been on how faculty promote and facilitate student success. Dr. Stabile has conducted numerous workshops throughout his career on topics such as critical thinking with Bloom’s Taxonomy, rubrics, cooperative learning, professional development, and sleep issues and learning. His belief about conducting workshops includes “...what do you want participants to know and be able to do with” the presented material. He describes his method as the “define and apply” approach to professional development. “I use this approach as any good classroom teacher would prepare for a lesson.”

The Center for Teaching and Learning is now housed under the Office of Institutional Research, Planning and Assessment. Dr. Stabile will be instrumental in helping us close the loop by reviewing and analyzing the faculty assessment and evaluation data we collect so we can truly know what we are doing well and to identify those areas where we might be able to improve. This KSC publication is a refocused effort which will allow Dr. Stabile to present to you articles and information that will be beneficial to your classroom and students. Each month’s newsletter will be written around a central theme pertaining to the classroom. We are excited about this department and the work that we can do together on behalf of our students.
AUGUST THEME: WHAT MAKES AN EFFECTIVE TEACHER?

By Dr. Chris Stabile

Anyone could be called a teacher; for example, my dad taught me to fix a flat tire, and it is possible that one of your relatives taught you how to ride a bike. Now I am able to fix a flat tire and you are able to ride a bike, but what happened that allowed us to learn? Psychology generally defines learning as a change in behavior over time based on experience. This definition is important because teaching implies that learning has taken place, in other words, a change in behavior occurred because of the effectiveness of the instruction. If my uncle were to teach me, I might not be able to change a flat tire because he did not possess the skills, such as patience or understanding, that my dad had. This could be true for you as well. Think of a relative like that in your family; could you have learned from that person? Now think of your classroom.

What must go on in the classroom that will change the behaviors of your students? Just think: if they knew very little of the material upon entering the class, but after exposure to effective instruction, they become more likely to engage in engrossing conversations with you or their peers. At this point, we can say that learning has taken place. However, what makes instruction effective, what teacher behaviors should we exhibit in order to promote learning?

I suggest that in order to be an effective teacher, one must inspire, and I will describe to you the necessary behaviors to inspire.

According to Wesley (1998), teachers must teach as a way of life. This means that a teacher should not come in, drop the books, and say “Now open your books to the middle of the page.” Your students will be most likely become confused, frustrated, and irritated. This is not very inspiring. Therefore, Wesley noted that effective teachers show empathy with their students. Yes, understand their background or other issues they may have. Remember that students today come to schools with more problems and issues than in the past, so both the college and its faculty must change with the times or become ineffective. This implies that teachers must be accountable to others.

Being accountable requires instructors to organize their classroom records, such as attendance, grades, and notes. An effective teacher is able to explain and document all interactions, for example, when an instructor works with a particular student, it should be documented to show that the teacher was involved with the learning process. As an instructor, you should also embrace adversity, as noted by Wesley. This means that change should be recognized, while respect and dignity of adverse individuals should be maintained. Move past anger and frustration and build an effective relationship to get a better understanding of another’s point of view. This adversity could come from students, other instructors, or administration; however, by working together and not against each other, student achievement can be enhanced.

Moreover, consider students for what they are and what they can become. Labeling is a disservice to students because an instructor’s point of view can alter how that person will relate to his or her class or other faculty. For instance, Wesley pointed out that, teacher A labels students a couple of days after the course began, he organized them into lazy, stupid, smart, careless, and mature, and so during the course those he deemed...
lazy were lazy because he treated them as such and those whom he deemed bright, he paid attention to more and it was clear to the class. However, teacher B encourages her students from the first day by telling them that they can be the best they can be. She is always reminding them that they will make a great contribution to society. This is inspirational teaching.

Another aspect of teaching effectiveness is to demonstrate competency and interest. These behaviors not only reflect content knowledge, but should show interest in others. Teachers should help students become interested and competent. Help them help themselves, by working with them, caring for them, calling them when they are not in class, and most importantly, listen to them; they have a lot to say about their lives, the course, teaching methods, and how the material and experience will impact their lives. Also, teachers should believe in their students even when the students do not believe in themselves.

Students will know if a teacher believes in them because of high expectations. If teacher A’s expectations are not high, then he is doing his students a disservice, or if teacher A is copying tests from a book and it does not match his syllabi, then this shows that he has low expectations and does not to care. Remember, effective teaching is inspirational. So an effective teacher should accept responsibility for the learning process. This is best taught by modeling, because an effective teacher will teach by doing. If a teacher is mediocre, then that teacher will receive mediocrity from students. It is also important to think.

Teaching is a thinking profession. Effective teachers will engage in thought-provoking discussions with more than one student in the front row and will also engage in discussions with their colleagues. The effective teacher tries to build a community of learning, where thinking, questioning, and discussion are the norm. Finally, if a problem arises, fix it now. If students do not show up, call after class, remember to document and explain what protocol was taken. If the assignment is inappropriate, then adjust it according to the needs of the students. These methods allow the effective teacher again to teach by example. Keep in mind that the long-term benefits of teaching are the best reward. When students come back to visit or write an e-mail or letter stating what they are doing, or that they made self-improvements, then teaching is worth it.

In sum, the items mentioned are actions. These skills will develop overtime but they must be practiced, and instructors must evaluate their own practices to be an inspirational teacher. Thus, effective teachers are flexible and they begin by changing their own behaviors.


NOW FOR SOME HELPFUL TEACHING TIPS

By Richard Leblanc, York University, Ontario (rleblanc@yorku.ca) Reprinted with permission from the author August 8, 2005

One. Good teaching is as much about passion as it is about reason. It’s about not only motivating students to learn, but teaching them how to learn,
and doing so in a manner that is relevant, meaningful, and memorable. It's about caring for your craft, having a passion for it, and conveying that passion to everyone, most importantly to your students.

**Two.** Good teaching is about substance and treating students as consumers of knowledge. It's about doing your best to keep on top of your field, reading sources, inside and outside of your areas of expertise, and being at the leading edge as often as possible. But knowledge is not confined to scholarly journals. Good teaching is also about bridging the gap between theory and practice. It's about leaving the ivory tower and immersing oneself in the field, talking to, consulting with, and assisting practitioners, and liaising with their communities.

**Three.** Good teaching is about listening, questioning, being responsive, and remembering that each student and class is different. It's about eliciting responses and developing the oral communication skills of the quiet students. It's about pushing students to excel; at the same time, it's about being human, respecting others, and being professional at all times.

**Four.** Good teaching is about not always having a fixed agenda and being rigid, but being flexible, fluid, experimenting, and having the confidence to react and adjust to changing circumstances. It's about getting only 10 percent of what you wanted to do in a class done and still feeling good. It's about deviating from the course syllabus or lecture schedule easily when there is more and better learning elsewhere. Good teaching is about the creative balance between being an authoritarian dictator on the one hand and a pushover on the other.

**Five.** Good teaching is also about style. Should good teaching be entertaining? You bet! Does this mean that it lacks in substance? Not a chance! Effective teaching is not about being locked with both hands glued to a podium or having your eyes fixated on a slide projector while you drone on. Good teachers work the room and every student in it. They realize that they are the conductors and the class is the orchestra. All students play different instruments and at varying proficiencies.

**Six.** This is very important -- good teaching is about humor. It's about being self-deprecating and not taking yourself too seriously. It's often about making innocuous jokes, mostly at your own expense, so that the ice breaks and students learn in a more relaxed atmosphere where you, like them, are human with your own share of faults and shortcomings.

**Seven.** Good teaching is about caring, nurturing, and developing minds and talents. It's about devoting time, often invisible, to every student. It's also about the thankless hours of grading, designing or redesigning courses, and preparing materials to still further enhance instruction.

**Eight.** Good teaching is supported by strong and visionary leadership, and very tangible institutional support -- resources, personnel, and funds. Good teaching is continually reinforced by an overarching vision that transcends the entire organization -- from full professors to part-time instructors -- and is reflected in what is said, but more importantly by what is done.

**Nine.** Good teaching is about mentoring between senior and junior faculty, teamwork, and being
recognized and promoted by one's peers. Effective teaching should also be rewarded, and poor teaching needs to be remediated through training and development programs.

Ten. At the end of the day, good teaching is about having fun, experiencing pleasure and intrinsic rewards ... like locking eyes with a student in the back row and seeing the synapses and neurons connecting, thoughts being formed, the person becoming better, and a smile cracking across a face as learning all of a sudden happens. Good teachers practice their craft not for the money or because they have to, but because they truly enjoy it and because they want to. Good teachers couldn't imagine doing anything else.

STACK THE DECK IN FAVOR OF YOUR STUDENTS BY USING THE FOUR ACES OF EFFECTIVE TEACHING

By Sean M. Bulger, Derek J. Mohr and Richard T. Walls. Reprinted with permission from the first author August 8, 2005

Introduction

If you had to select four instructional principles that best describe your teaching, what would they be? How do the instructional principles that you have identified contribute to student learning in your classroom? What strategies do you employ to systematically implement these instructional principles in a variety of educational contexts?

The types of self-reflective questions listed above provide the basis for the continual refinement of an individual's instructional practices. As a teaching professor, you should be willing to engage in the rigorous self-examination of your own teaching philosophy, methodology, and effectiveness. The purpose of this article is to describe the "Four Aces of Effective Teaching" (Walls, 1999) as a conceptual framework for increased self-reflective practice among teachers in higher education settings [7]. Following the completion of this article, the reader will be able (a) to explain the theoretical rationale for the Four Aces of Effective Teaching, (b) to describe the Four Aces of Effective Teaching, and (c) to provide suggestions for the application of these fundamental instructional principles to teaching practice.

Research on Teacher Effectiveness

Teaching effectiveness is dependent upon the interaction between the instructor's subject-matter knowledge and teaching (pedagogical) ability. The following scenarios illustrate the nature of the complex interaction between these two critical variables:

1. An individual may possess a substantial amount of subject-matter knowledge, yet be unable to design and implement instructional methods to enhance student learning due to a lack of pedagogical ability.

2. Conversely, an individual may possess some generic pedagogical skills, yet have limited subject-matter knowledge and again be predisposed to ineffective teaching.

These scenarios indicate that it is impossible to be an effective teacher without being competent in both subject-matter knowledge and pedagogical ability. Consequently, subject-matter knowledge remains a
necessary prerequisite for effective teaching, not the sole determinant.

Teachers, instructors, and professors are required to fulfill many roles and perform many duties that may be considered ancillary. At the core of the roles and duties is the actual practice of teaching. The primary purpose of this teaching practice is to facilitate student learning. Learning may be defined as a change in behaviors, attitudes, or capabilities. Effective teachers promote student learning, and related instructional methods have been extensively documented in the educational research literature.

The research literature on "teacher effectiveness" and reviews written summarizing that body of research provide guidance (e.g., Brophy & Good, 1986 [1]; Dunkin & Doenau, 1980 [2]; Fisher, Berliner, Filby, Marliave, Cahen, & Dishaw, 1980 [3]; Rosenshine & Furst, 1973 [4]; Smith, 1979 [5]; Walls, 1994 [6]). The findings are based on "process-product" research. In other words, when a teacher does this (process), it results in this sort of student achievement (product). When a teacher causes this to happen (process), it results in student learning (product). Rosenshine and Furst (1973) wrote the first major review of this research literature [4]. They concluded that the five most important teacher-effectiveness variables are (a) Clarity, (b) Variability, (c) Enthusiasm, (d) Task-oriented and/or Businesslike Behaviors, and (e) Student Opportunity to Learn Criterion Material. Brophy and Good (1986) [1] wrote a major review of the literature to that date, finding strong support for the components of effective teaching identified by Rosenshine and Furst (1973) [4] but summarizing the strong elements under different headings.

They also found increased support for such process variables as "time on task." Walls (1994) was not so parsimonius, listing 99 process-product relationships for effective teaching [6].

The Four Aces of Effective Teaching

The "Four Aces of Effective Teaching" (Walls, 1999) summarize the most prevalent recommendations from the teaching-effectiveness research literature [7]. They are the strongest links between what teachers can do and the learning that students achieve. The Four Aces represent a consolidated way of thinking about the "process" of teaching as it influences the "product" (student learning). You may think of them as catalysts for learning. Student learning is better, faster, and/or more long-lasting when teachers are able to play the Four Aces. The Four Aces of Effective Teaching are summarized in Figure 1.

Ace 1: Outcomes

The first Ace of Effective Teaching concerns the utilization of an outcomes-based instructional orientation. Outcomes enable students to focus their attention on clear learning goals. These outcomes inform students of where they are going and how they will get there. Outcomes also provide the teacher with a framework for designing and delivering the course content. Furthermore, outcomes enable teachers to assess student learning as a measure of their own instructional effectiveness. More effective teachers use designated outcomes as a basis for the establishment of curricular alignment. Curricular alignment is the degree to which the employed instructional methods and assessment techniques...
enable the student to acquire and/or demonstrate the desired outcomes.

What were the desired student outcomes for your last class meeting? Were the outcomes directly stated or implied? What did your students actually learn, and how was that learning documented? Did the employed instructional strategies effectively contribute to each student’s ability to accomplish the stated outcomes?

Ace 2: Clarity

The second Ace of Effective Teaching involves the clarity of instruction. More effective teachers typically provide students with highly explicit directions and explanations concerning the course organization and content. When delivering instruction, nothing should be left to chance. If students are not meeting your expectations, your methods of delivery may lack the required degree of clarity. When a teacher tells, shows, and makes the message available from alternate perspectives to alternate senses, that teacher is engaged in effective instructional practice. Additionally, the course should be structured in a way that affords students the opportunity to make connections between the new material that is being presented and the concepts that they have already learned. This instructional strategy is referred to as curricular scaffolding. When a teacher helps students connect new information with what they already know, the teacher is assisting these students in accurate organization of information.

During your last class meeting, what instructional techniques did you employ to provide the students with a clear explanation of the lesson content? What types of illustrations, demonstrations, heuristics, and the like were used to supplement and clarify verbal explanation? Were there any concepts and/or skills that you were able to incorporate from previous lessons and courses? Did you allocate sufficient time for your students to ask questions so that you could clarify information? Did you make complex subject matter clear and easy to learn?

Ace 3: Engagement

The third Ace of Effective Teaching is engagement. This principle suggests that students learn by doing. The formal lecture represents an archaic model defined by instructor as deliverer and student as receiver. This model exemplifies one-way communication and perpetuates an incomplete model of education. Accordingly, teachers must create a dynamic, educational environment that affords students the opportunity to practice every concept that they are learning. More effective teachers utilize instructional strategies that engage students repeatedly throughout the entire lesson. This engagement should begin early in the lesson and continue throughout the lesson introduction, body, and closure. As a general rule, a teacher should limit a lecture to no more than thirty minutes before employing a learning activity that actively engages all students (Walls & Cather, 1987) [8]. Furthermore, these engagement activities are intended to facilitate the development of the knowledge, skills, and attitudes that will enable the student to accomplish the previously identified lesson outcomes. This type of curricular alignment is a critical component of an effective, student-centered learning environment.

In your last class, how much time were your students engaged in
learning activities other than note taking? On how many occasions during your last class did students have the opportunity to be actively engaged in the learning process? How many of your students are asleep or off-task at any point in a given lesson?

Ace 4: Enthusiasm

The fourth Ace of Effective Teaching is enthusiasm. As straightforward as it may seem, “if you hate to teach it, your students will hate to learn it.” Conversely, if you love to teach it, your students may very well love to learn it. Enthusiasm is contagious. More effective teachers display a high level of enthusiasm that reflects their professional competence and confidence. These characteristics are derived from the individual teacher's subject matter knowledge and instructional experience. Teachers can begin to establish a positive learning environment by showing their passion for the subject matter, using student names, reinforcing student participation during class, and being active in moving among the students. The most critical component for fostering classroom enthusiasm, however, is student success. Accordingly, it is the teacher's responsibility to establish a classroom environment that allows for a high degree of student achievement. Ultimately, high levels of student achievement serve as a powerful motivator for both student and teacher.

Were your students excited about attending your last class? Were you excited about teaching your last class? What have you done to effectively communicate your passion for the subject matter that you teach to your students? What strategies do you employ to stay current in your field of study and communicate your excitement about new developments? How have your past teaching, research, and service been used to positively impact the teaching-learning environment for your students?

Sample Lesson

In order to optimize student learning, teachers should plan to integrate the Four Aces of Effective Teaching throughout each lesson. The following sections describe the components of an effective lesson, the purpose of each component, and respective strategies for the practical application of the Four Aces of Effective Teaching.

Instant Activity

An instant activity is an educational intervention that is used to engage students immediately upon entering the classroom. An instant activity can serve as a review of previous course material, a preview of upcoming information, and a management technique for organizing the class. An instant activity can be used with individuals, small groups, or an entire class. To achieve success with an instant activity, the tasks should be clear, simple, and based on students’ prior knowledge and/or skills. For example, the teacher could engage students as they enter class by (a) asking the students to formulate questions based on the assigned readings for that class period and having peers answer them, (b) administering an informal pre-test on the lesson’s key concepts, (c) allowing students to work in small groups to answer teacher-directed questions that have been written on the board, or (d) encouraging students to reflect on their own personal experiences regarding the day's topic as a catalyst for in-class discussion and subsequent
learning of subject matter to be introduced.

Lesson Objectives

After the students complete an instant activity, the teacher should present the students with daily objectives (outcomes). The central concept is to specify these objectives in terms of student performance. These outcomes inform students of what they should know or be able to do at the completion of the lesson. Teachers can subsequently assess student achievement of the stated objectives as an indicator of student learning and their own instructional effectiveness. For daily objectives to be utilized effectively, they should be clear, measurable, and directly related to the desired course competencies. For example, following a lesson on cardiovascular fitness, the students in a health promotion course may be required (a) to define cardiovascular fitness, (b) to identify the body’s physiological response to exercise and the associated health-related benefits, and (c) to design an exercise program to enhance a patient’s cardiovascular fitness. In another example, following a lesson on buoyancy, students in a physics course may be required: (a) to define Archimedes principle, (b) to solve a problem involving buoyancy, (c) to make an object that floats, and (d) to discuss the effects of water displacement on boat design.

Advance Organizer

An advance organizer can be a topical outline, diagram, or concept map that has the primary purpose of providing a coherent structure for the presentation of the involved instructional material. An effective advance organizer clarifies the scope and sequence of a lesson for the teacher and student by providing an overview of the lesson content. Accordingly, an advance organizer assists students in structuring their thinking, class notes, and out-of-class study. A lesson on stress management, for example, may include the following sequentially arranged components: (a) definition of stress, (b) physiological response of the human body to stress, (c) causes of stress, and (d) effective stress management techniques. In another example, a statistics teacher might present a diagram to represent the types of graphing techniques that will be discussed during the lesson and the amount of time that will be allocated to each technique (see Figure 2).

Lesson Body

The lesson body typically represents the major portion of the lesson where the teacher provides information to the students and assists in their construction of functional knowledge structures. Traditionally, the lesson body is constituted by a lecture or lecture-discussion format. More effective teachers use the Four Aces of Effective Teaching during the lesson body. During this time, information should be presented enthusiastically and clearly. Furthermore, the lesson should build upon students’ prior knowledge and actively engage the students repeatedly. In addition, the material presented and the assigned activities should serve as a means for students to achieve the daily lesson objectives (outcomes). To accomplish this, teachers should design learning activities and distribute them throughout the lesson body. For example, a teacher may have students (a) write a question that others answer, (b) assemble slips of paper to construct a sentence or a story outline, (c) draw a graph of a phenomenon from memory, (d) speculate about
effects of recycling, (e) circle words on a worksheet, (f) locate Disney on the Internet, (g) discuss Hamlet's dilemma, (h) build a mutual fund, (i) tell each other messages about a ball's trajectory with their backs turned to each other, (j) brainstorm provisions for a treaty, and (k) about 500 other ideas.

Lesson Closure

A closure should bring your lesson full circle. Although a closure is considered a necessary part of an effective lesson, many teachers may sacrifice this portion of the lesson due to time constraints. A closure, however, is a vital part of an effective lesson and can serve as the time to reiterate the lesson objectives, clarify the organization of the lesson, summarize the lesson body, check for student understanding, and preview the upcoming lesson. Most importantly, a closure can maximize student engagement time through the use of a variety of reflective activities. Your students should engage in an effective closure on a daily basis. For example, after reviewing the key points of a lesson on cultural diversity and communication skills in the workplace, the teacher can engage the students in a reflective activity by requiring them to list three strategies for improving their own communication skills in a culturally diverse work environment.

The preceding illustration of a sample lesson represents one systematic approach for integrating the Four Aces of Effective Teaching into educational practice. Only your imagination and commitment to your students limit the possibilities of how you might employ these principles.

The Final Hand

A teacher's primary responsibility is to facilitate learning. The research literature on teacher effectiveness gives excellent guidance for doing the job of teaching well. The Four Aces of Effective Teaching (outcomes, clarity, engagement, and enthusiasm) assist in bringing order out of potential chaos. The aces represent principles that, when systematically implemented, can enhance student learning and be used as a vehicle for continual self-examination to improve your instructional effectiveness. The basic tenets of the Four Aces of Effective Teaching should be stock items in the arsenal of conscientious objectors to bad education. Therefore, if you fancy yourself a student advocate who does not want to gamble with instructional practice and student learning, then bet on a sure thing and stack the deck in favor of your students by utilizing the Four Aces of Effective Teaching.

Can you find and mark examples of the components of an effective lesson in this article? Can you find and mark examples of the Four Aces of Effective Teaching in this article? Can you explain the Four Aces of Effective Teaching to a colleague? Can you design a new lesson or redesign a previous lesson using the instructional and organizational principles described in this article?

References

Brophy, J., & Good, T.L. (1986). Teacher behavior and student achievement. In M.C. Wittrock (Ed.), Handbook of research on teaching (3rd ed.). New York: Macmillan. [R]


FIGURE 1. The FOUR ACES OF EFFECTIVE TEACHING

**A♦ OUTCOMES**
- Let students know where they are going and why.
- Drive hard toward clear goals.

**A♦ CLARITY**
- Make the content as clear and simple as possible.
- Build on what students already know.

**A♣ ENGAGEMENT**
- Don’t lecture for more than 30 minutes before running an activity that involves all students.
- People learn what they DO, so have students DO everything that you want them to learn.

**A♥ ENThusiasm**
- If you hate to teach it, your students will hate to learn it.
- The only key to motivation is success.
FIGURE 2. ADVANCE ORGANIZER FOR STATISTICS

Graphing Techniques
Types & Time Allocation

- Pie Chart: 25%
- Bar Chart: 25%
- Histogram: 15%
- Line Chart: 25%
- Box Plot: 10%