



**CCBC**

The Community College  
of Baltimore County

# TEACHING FOR SUCCESS™

The Journal of Critical Success Factors Teaching—Dedicated to the vital work of Part-time and Full-time Faculty and Teaching Assistants



**September 2000**  
**Volume 12 Number 6**

Jack H. Shrawder  
Coeditor, *TFS*

each session, but if you do, you will be rewarded. Your students will actually learn more in less time than when you teach for 50 minutes or longer.

Here are six rules for increasing retention that you should be able to recall:

- ❑ What is unusual is remembered in greater detail; eliminate dull learning routines and you improve retention automatically.
- ❑ Organize the material; categories make new material much easier to remember.
- ❑ Make information as tactile as possible; it's naturally easier to store in memory, and it's the reason students love real-world examples that illustrate abstract concepts and principles.
- ❑ Visual memory is very powerful; thus the more a subject is illustrated, charted, diagramed, pictured, colored and textured, the more effortlessly it can be committed to memory, especially when students create their own visuals.
- ❑ Review early and review often; review is the process whereby stronger and stronger memory links are forged; time spent on review can double, triple or even quadruple recall.
- ❑ We remember more when we decide to remember; invite your students to make a conscious decision to remember, and they will!

▲ *To understand learning, we need to understand the rules of memory and how to help our students improve their retention and recall.*

**E**ffective memorization is the key to excellent recall. Learning research is steadily adding techniques to improve the transfer of material to the long-term memory, thus improving recall. The more you know about how memory works the more you can teach for success.

In fact, memory principles are at the heart of the Retention phase of the TFS PIE R3 teaching system (Prepare, Input, Explore, Retain, Reconfirm, Reflect). The first article of this series focused on the Preparation section of the PIE R3 system, and it

appeared in the August 1999 Issue of *TFS*.

The recommendation from many learning experts that learning sessions last no more than 20 minutes is based on the retention curve. It has been found that students remember a higher percentage of the material at the beginning and at the end of learning sessions than in the middle.

Therefore, when you break learning into shorter segments you increase the time when retention is at its peak. You may be reluctant to shorten learning sessions and include a two-to-four-minute break between

## The Crucial Element

Terri Cameron  
Business/Marketing/Advertising  
Jackson Community College  
Jackson, MI  
tcameron@pmai.org

**M**y background is in business, specifically marketing and advertising. Business has taught me many things about solving problems, meeting challenges and most importantly, working with people.

### Relationship

Whose class is it anyway? Your first reaction may be to say it's yours! In many regards it is, but looking at the bigger picture there's more involved than just you. As we all know, teaching is like a business in many ways.

In business a department functions much like a classroom. The teacher functions like a boss and the students are the staff. A department can have many of the same issues a classroom has, including a diverse staff who may sometimes arrive late or not at all, cause disruptions and not complete projects on time. Sound familiar? It should! After all, your classroom can be considered a microcosm of informational commerce.

So, now we agree running a classroom is much like running any organization. Next comes the big picture idea. An analogy was just made that students are like staff. Well, staff and students should be considered customers! Yes, I said customers. Businesses don't prosper, excel or survive without customers.

Many managers/teachers forget that the core customer in business is the one you work with every day! I have often said, the hardest part of being in management is dealing with the people—the staff.

It's the biggest part of my job, and sometimes the most complicated. Managing staff takes up the majority of my day, and it should! My job is to make sure the staff is a productive team. That means we must meet deadlines, overcome and minimize our mistakes, learn from each other and interact well together—sound like your classroom?

I assume most teachers would agree students are also customers. But do you treat students like customers? This is the crucial management aspect that continues to get overlooked in the classroom. What are the advantages?

### Ownership

In business, goals for a department are much like a course syllabus—it's an outline of what you plan to accomplish within a set time frame. To accomplish goals you need to acquire ownership from the people involved. If teachers are lecturing a full class period, they are not gaining ownership from the students involved. Involving people in the



▲ *Whose class is it anyway? Your first reaction may be to say it's yours! But is it?*

process of achieving the goals will help. Involving people doesn't mean you lose control in the classroom.

It can, however, mean you gain a better understanding of the dynamics of the class. By doing so, you and your students together can adjust certain components of the class in order to achieve the goals of the course. When students have input into the process, they gain ownership in achieving goals.

In business you learn from your customers. It's always nice to know what works, but more importantly it's best to know what doesn't. Staff will never be productive if they are working in a system that doesn't work for them. As a manager, it's my job to see what's not working, and no! not fix it for them, but work with the staff to find a resolution that will work in order to achieve the final goal.

## Teach Terminology with Technology

Amy Murphy, RPT  
Department of Physical Therapy Assistants  
Anne Arundel Community College  
Arnold, MD  
amurph60@yahoo.com

**T**o assist the process of mastering new terminology I have found word games to be a successful tool for the students. I develop word searches, crosswords, anagrams, plus others using the web site <<http://www.puzzlemaker.com/>>[www.puzzlemaker.com](http://www.puzzlemaker.com).

By following the instructions and inserting the chosen terminology word games can be developed in minutes. Then I make printed copies for the students. These are then used for their personal use to master new terminology.

## TEACHING FOR SUCCESS™

(ISSN 1084-0427) is published monthly 8 times per year, August through April by Pentronics Publishing, PO Box 8379, South Lake Tahoe, CA 96158-1379. Subscriptions: Academic Year,

eight issues. Duplication and Electronic Distribution Licenses and Deluxe Color Copy Group Discount rates available. Contact Pentronics or see [www.teachingforsuccess.com](http://www.teachingforsuccess.com) for the latest pricing information—

Phone: 530-573-8964; e-mail: [T4S@thegrid.net]  
Coeditor: Jack H. Shrawder, Coeditor: Penny Shrawder  
Copy Editor: Karen Sansone, Printed by Registered Ink, Reno, NV.

**POSTMASTER: Send Address Changes to TEACHING FOR SUCCESS  
PO Box 8379, South Lake Tahoe, CA 96158-1379. Fax: 530-573-8965;**

# On the Wrong Teaching Track? Six Rules to Set It Right

Jack H. Shrawder  
Coeditor, *TFS*

If your teaching has not been producing the positive results that you have hoped for, you may not be following the rules for good teaching. These six rules will help get you back on track.

## Rule one

Design and manage your course to meet your students' needs, and they will return the favor and satisfy your need for positive feedback and a positive class evaluation.

## Rule two

When in doubt, refer back to rule one.

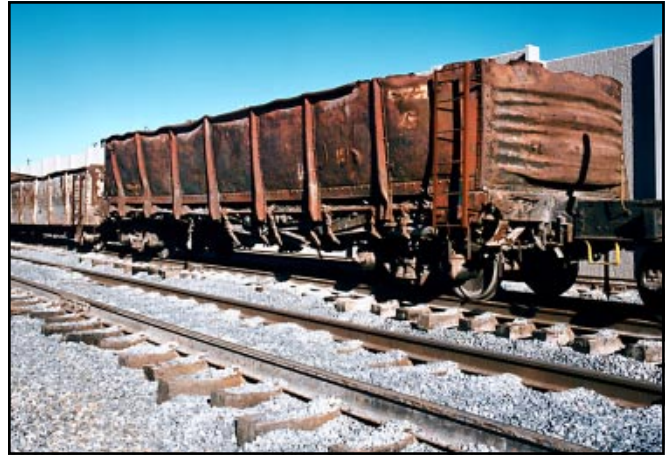
## Rule three

Most students need a well-organized, planned sequence of instructional events to help them do their best. Success in teaching begins with completing the following planning tasks without fail:

- ❑ Prepare yourself mentally before each class meeting by imaging in your mind just how you want the class to go. Use good self-talk (I can do it; I'm a terrific instructor; etc.) and decide that you are and have every right to be their teacher. In other words, you have to communicate confidence in your abilities and if you don't have it, you have to fake it until you begin to believe in yourself and your abilities.
- ❑ Decide what is practical for your students to learn given the time and abilities and equipment and class environment. Determine what is must-learn material and nice-to-know information.
- ❑ Make a list describing how your students will be different at the end of your course. Detail exactly what you expect them to learn even if this could be somewhat different for each student.
- ❑ Communicate to your students what you expect them to be able to DO at the end of the class. This is your list of outcomes or benefits that your students will achieve. Share this list with them; this is vital because your students want to know what's in this class for them.
- ❑ Prepare a detailed course syllabus or outline, and distribute a printed copy to each student.
- ❑ Go over the syllabus items with your students and get consensus on such things as learning activities and grading and deadlines for projects and homework.

## Rule four

Prepare, plan and execute your plan. Good classes are a result of excellent and detailed course and class-by-class planning before the first class meeting ever occurs and before every subsequent class meeting:



▲ *Is your class going no where fast? Try implementing six rules of survival teaching to get back on the mainline.*

- ❑ Create a description of your teaching activities. Describe your teaching activities, demonstrations, lectures, etc.
- ❑ Your students need to know what you will ask of them and how you expect to communicate to them new ideas, principles, procedures and techniques.
- ❑ An easy and basic teaching pattern is: Tell them, tell them what you told them with examples, and ask them to tell you what they think you told them. Then present them with problems and challenges to put the new knowledge to work and to discover new meanings.
- ❑ Add energy and variety to each class; students love surprises—novel activities, games and solving real-world problems.
- ❑ Add some kind of review activity to each learning session. For example, ask them to put what they have learned in their own words and record it in writing.

## Rule five

Get feedback! Teaching is as much listening as it is presenting, directing, facilitating and demonstrating. Use active feedback to let the students know what you heard them say or ask before responding.

Distribute 3 x 5 cards and ask students to write down what they expect to gain from the class and what their learning goals are. Or why they are taking the class and what they hope to accomplish. Ask students to summarize the most important thing they have learned after each class session.

## Rule six

Have fun, make mistakes and don't worry. No teacher has to be perfect. Tiger Woods can outplay his coach and teacher but he still needs a teacher to help him analyze and perfect his techniques. Art teachers don't have to paint perfect pictures, English instructors don't have to write the next great novel, science instructors don't have to win a Nobel Prize to receive rave reviews from their students. But they all must be able to help their students meet their educational goals and improve their knowledge, skills and attitudes.

## Strong Bonds Fight Rising Student Withdrawal Rates

Royal Loresco  
South Texas Community College  
McAllen, TX  
lorescor@stcc.cc.tx.us

Institutions of higher learning, specifically community colleges, face an ongoing challenge in student retention. For many reasons, students decide to withdraw from courses. Often these decisions rest in personal circumstances, yet many are based in social and interactive dimensions. Faculty members and academic advisors often hear students comment:

- "I really don't think I belong in this class."
- "I don't relate to anyone."
- "I have to withdraw, I'm behind and no one cares anyway!"
- "Getting out is the easiest thing to do, maybe next semester it will be a better situation."

But, you possess the position and status to create the bonds through lecture and teacher-student interaction that can counter these negative feelings.

Students can make connections and develop relationships all over campus. The development of informal and formal bonds can range from staff (campus security, cafeteria personnel and custodians) to upper levels of administration. Students may even develop connections with computer technology (internet, e-mail), and campus recreation. These patterns of connectedness can begin or be maintained by faculty. You have a special, significant opportunity to connect:

- The student to his or her classmates,
- The student to the class/coursework
- Yourself with the student.

Academic bonds create further incentives for students to seek additional roles from faculty (letters of recommendation, club/program involvement, academic advising, institutional networking, etc.).

### Names

An individual does not have to be a minority, a special admit, an athlete or

a nontraditional student to appreciate the instructor's knowledge of his or her name. A teacher's awareness of a student's name leads to perceptions of interest and concern. Students also will reciprocate this energy in feelings of accountability and responsibility. Hence, many students feel a necessity to come to class and be alert because the teacher knows who they are.

### Background

An instructor can obtain student background information by implementing biography data assignments at the beginning of the semester and through interaction via lectures and office hours. Later, instructors can use student information in lecture, or refer to students' own expertise.

Students learn more efficiently if they can place their own experiences in the course material. As an academic bond, the student believes that the instructor is genuinely sensitive to the student's history. Thus, many students feel a sense of belonging to the course and instructor.

### Share yourself

Students love to learn that their instructor is like themselves, a human being. Students consult instructors who are not only accessible, but also approachable. Students who have some awareness of their instructor's background develop obligations to share their own background information and ideas.

Hence, this bond can create levels of confidence where students can participate in class, and consult teachers outside of class. My favorite bit of information that I share with students who lack confidence in math are my undergraduate and graduate hour grades in statistics.



▲ *Are your students voting with their feet reducing income for your institution and lowering your self-esteem?*

### Connection

Connect students with their classmates. When students fall behind, they can consult among themselves. Research has found that lower division students often consult senior-class people for class registration advisement. Students who live in residential life environments (dormitories) seek advisement from student neighbors. Thus, it's possible for teachers to establish classmate connections within the course. Allow students to tear down the barriers of competition and territorialism amongst themselves, so that they can seek and console each other through crisis. This can be done through study groups, group learning, tandem assignments and partnership responsibilities.

### Flexibility

In the real world, instructors realize that semester courses are dynamic and in a state of flux. Tests may be postponed, videos may be cancelled and the total point distribution is then revised to fit time restraints. Students also face this dilemma. A student's schedule may often warrant a flexible timetable.

Instructors design their courses based on a grading system. Instructors should also design their academic interactions on a retention system. In my opinion, the college system can become even better if we continue to ask these questions:

- "How well will this student do?"
- "Will this student stay?"
- "Will this student become connected?"
- "What academic bond can I create?"

# Crucial Communication Strategies for Large Classes

Donald Petkus, *TFS* Partner Author  
Adjunct Faculty, General Education Department  
Ivy Tech State College  
Bloomington, IN  
dpetkus@bloom.ivy.tec.in.us

**H**ow do you communicate with large classes and students who come to class irregularly?

In some large classes, asking questions and other forms of participation seem inhibited by the very size of the class.

Some class sections are floating poker games. Aside from a few regulars, one cannot predict which or how many students are going to show for a particular meeting. The results are students who are unprepared for class and feel disconnected from the class and their instructor.

## Multiple channels

Using multiple channels of communication can help reduce such problems and help students keep current on assignments and deadlines. What follows is a sampler of techniques and strategies that I've borrowed over the years that may help keep even sporadic attendees current on class activities and assignments. Pick and choose those that may apply to your own situation.

## Optimize

Optimize your syllabus and print materials. What can you do to make the most out of class handouts?

- Put a boxed space in the syllabus.
- Ask students to fill in the name and contact information for a fellow student in the class.
- Students are often more likely to talk to each other about missed class meetings than to their instructor.
- Refer to the syllabus frequently in class.

Remind students that such a thing exists and that they are responsible for keeping track of it. Don't tell students what the assignment or event is. Ask them. It emphasizes the importance of the syllabus to have students dig them out and refer to their copies in class. Post the syllabus on the course web site if any. Students with access to the Inter-

net may actually bookmark the course web site, finding not only the syllabus but also the latest course announcements. On class handouts, include reminders about important deadlines and upcoming events.

## Group projects

If group projects make sense for your subject, make them part of the class requirements. Assigning a group grade for some projects will encourage students to communicate outside the classroom. A group project can evolve into study groups and informal support structures that will keep members up to date. Group assignments are especially valuable in large classes to keep up student involvement and participation.

## Voice mail

If you have voice mail at your campus, you can use it as another communication channel. Update your greeting to include upcoming events, schedule changes, assignments and other frequently asked questions. No voice mail? Leave an updated syllabus with the secretary. He or she may be able to answer a student's question if you're not available.

## Computer technology

Take advantage of communication software. If you're not comfortable with computers, you may get help from your computing support center. Constructing e-mail groups is an easy option for mass distributions of study guides, course announcements and take-home assignments.

E-mail is a good way to establish two-way communication for students who avoid speaking up in class. Some web sites have instant messaging/chatroom capability. Students can use chatrooms for collaboration and discussion, as well as



▲ *Are your students voting with their feet reducing income for your institution and lowering your self-esteem?*

socializing. Create a virtual office. At scheduled times, instructors can arrange to meet students in a chatroom and communicate in real time from home or office without needing to travel.

Some caveats apply:

- Make it clear that electronic communication supplements but does not replace attendance.
- Consider whether you wish to accept assignments as e-mail attachments and make your policy clear at the outset. (Generally it's not a good idea due to file sizes, incompatible formats and other difficulties.)
- Make students responsible for a written self-assessment about mid-term. Use a simple format, perhaps a memorandum from the students to you in which they identify any problems they're having, ask questions and give an estimate of their expected grade.
- Ask them for some suggestions and comments on how to make the class more effective. Make this a graded assignment, but be uncritical of the content.

In any event, be sure to give the student written feedback. As well as an opportunity for communication, this assignment gives the students some power and responsibility in their own learning. Often the self-assessment exercise can be an important wake-up call for some students and instructors.

## Feed Them and They Will Perform

Jane Vire Tichenor  
Skills Advancement Chair  
Community College of Indiana-  
Evansville Campus  
Evansville, IN  
jtichenor@ivy.tec.in.us

All semester I had challenged the students to strive for excellence and turn in papers with no mistakes.

To help them achieve this goal, I gave them proofreading exercises to increase their ability to spot mistakes. I noticed that several students were doing quite well, but I also noticed that some of the students didn't seem to be taking the assignments too seriously.

Toward the end of the semester while they were working on one of the more difficult exercises, I decided to challenge them. I told them that if the class could come to an agreement and present the exercise to me with no mistakes, I would treat them to a pizza party. After giving them time to work on the exercise, I wrote the paragraph on the board and had each student make two corrections.

Then I told them they had 15 minutes to discuss the corrections and decide if anything needed to be changed. Something amazing then took place. I could not believe how involved the discussion became and the difference I saw in some of the more passive students. They were determined to win the pizza party.

In fact, one of the laziest students became quite adamant about one of the answers and stated emphatically, "If you change that answer, you will cause us to lose our pizza party! So leave the answer alone because we are not going to lose this contest!" And, yes, he was right about the answer. But some of the student still disagreed, so he asked me if they could use their handbook.

I told them they could use whatever they needed to come to an agreement. What I had intended to be a thirty-minute exercise turned out to last the entire class period, but it was worth it to see the students actually using the skills I had been teaching them. They finally came to an agreement, and with trepidation submitted their completed exercise to me. To my delight they turned in a perfect paper; therefore, I gave them a pizza party the last week of class.

## Learn with Posters

Janet Barhart, RN, MS  
Nursing Instructor  
Hocking College  
Nelsonville, OH  
barnhart\_j@hocking.edu



▲ *Thyroid?*

Posters make learning difficult information fun. In nursing, students moan and groan about the difficulty of the endocrine system. So I have the class create posters to help make learning fun.

The posters are done as a review technique after the material has been presented in class. Students are asked to get into small groups of five or six students.

Each group selects an endocrine disorder and is given a blank poster and several markers. The group is asked to draw someone with the signs and symptoms of their disorder.

Symbols can be used, but words are to be kept to a minimum. The end result is an exaggerated, funny drawing. When the posters are complete, two members of each group are asked to present the poster to the class.

Another way to create posters is by making a collage from magazine pictures. Again, students are divided into small groups. Each group chooses a stage of growth and development such as young adulthood.

Pictures depicting developmental tasks from this stage are then pasted on a black poster. Students become quite creative when selecting and arranging pictures. Some will even arrange the pictures to tell a story.

During the poster activity, I circulate among the small groups answering questions and encouraging everyone to get involved.

Students with artistic talent enjoy showing off their handiwork. Other students volunteer to color the figures or to paste pictures. Still others will agree to explain the poster to the entire class.

Most students make positive comments about the poster activity. They say things like, "This was the most fun class." Even more positive is when students remember information from their poster.

## The Attendance Sheet Assessment

Lisa Albers, TFS Partner Author  
Graduate Student  
University of Miami  
modernscribe@earthlink.net

Still passing around that boring attendance sheet? Try using it to glean occasional daily assessments from your students.

One day, I was looking for a way to include icons—pictures or symbols to visually express an idea or emotion—in my teaching because they worked so well in an instruction workshop I attended last summer.

I have this habit anyway of drawing happy faces on student papers, so I asked my students to join me in the habit. Next to their names on the attendance sheet, I began asking them for feedback. I started out with a playful one: "Draw an object you really wish you had today." It was raining that day, so the page was soon filled with umbrellas! It provided a little bit of comedy, and it also lent a feeling of solidarity to the classroom atmosphere.

On subsequent attendance sheets, I got more serious; for example, I asked on days essays were due how confident they felt about their completed essays. Responses ranged from simple smiling or frowning faces to a Rocky figure holding his hands up in victory!

Because this assessment is not anonymous, I was afraid students would give responses meant to please me or that they would be too influenced by previous students' entries. However, I found that they had no qualms about expressing whatever was on their minds independent of other students or me. Often, these quick attendance assessments flag valid student anxieties and can help me make adjustments to the course right when they are needed.

While the attendance assessment can be fun as well as a powerful tool, I don't recommend using it every day, for it can get old. I wait until a good moment presents itself, such as my very own St. Louis Rams' victory in the Super Bowl. The students who came closest to the final Super Bowl score won Rams-colored computer disks. (On which to save their brilliant essays, of course!)

## TFS Web Review—Guide to Grammar and Writing

Elizabeth A. Butts, *TFS* Partner Author  
English Department  
Delaware County Community College  
Media, PA



▲ Elizabeth A. Butts, *TFS* Web Review Partner Author

**T**he Guide to Grammar and Writing, <http://go.to/grammar> web site is a must-bookmark for every English teacher and student alike.

After visiting it, you will wonder how such a wonderful service can be free. It contains as much, if not more, information as a textbook, but in a much more user-friendly format. Another valuable feature is that the web site is hands-on.

Because there is so much information, I will just highlight the main attractions. The initial section is what I call the handout/information section.

It contains valuable information on English concerns at the sentence level, paragraph level and essay level.

Each topic is explained in an easy-to-understand and creative manner with plenty of examples and respective PowerPoint presentation links where available.

The next main attraction is the interactive quizzes. This section features over 160 quizzes on a myriad of English concerns. After each quiz is taken, immediate feedback (a score) is provided with the option of linking to the handout that explains that particular concept.

The final section I will highlight is the *Ask Grammar* section. If you have a question about English usage or punctuation that you can't find an answer to, here is where you can find it. You can submit the question on-line, or you can review the logbook of previous grammar questions and answers.

### How can I use this resource in my classroom?

You can send students to the web site to:

- Learn more about a writing concept that you have covered in class, but with which a student needs additional help.
- Learn about a topic that you don't have time to cover in class but with which a student is experiencing problems.
- Give students a resource to access when you are not available (*Ask Grammar*).

You could make these topics optional or required. If you make one of these activities a course requirement, students can easily print out a quiz or handout as evidence that they completed an assignment.

I'm sure many of my fellow English teachers will agree on the value of this site, but what about teachers in other disciplines? How can this site be of use to them? I imagine this could be a very helpful site for teachers at colleges where writing across the curriculum has been implemented.


For example, in a history course, there might not be any time for punctuation lessons (although correct punctuation may be expected on a paper). So what is a history professor to do?

This site is the perfect resource to send students to because it is self-explanatory (you don't need to do anything extra except give them the web site address).

You may also want to sharpen your own writing/grammatical skills without having to ask an English professor colleague for help (how embarrassing can that be?).


In any case, all who visit this site will not be disappointed!

On Leadership:



Enthusiasm is at the bottom of all progress. With it there is accomplishment. Without it there are only alibis.

—Henry Ford



## Writing Your Life History

Margaret L. Ingram  
Seattle Central CC, WA  
Scottsdale CC, AZ  
[margaret@proaxis.com](mailto:margaret@proaxis.com)



**I**n today's mobile society the lack of family ties is taking away the opportunity to share the stories of the past with our children.

Our schools need to reacquaint students with their history. Our studies in school include world history, geography, and United States history, the Renaissance and Reformation, explorers, trappers, and reading maps.

History also includes the lives of ancestors, parents, ourselves, and a way of life, a period in history, and the places. It may be the biography of a grandmother, a chronology of a sister's life, a journal of a grandfather's life, a legend left by a father, or a memoir focused on the Great Depression or World War II.

A life history project encourages the sharing and recording of the stories of the memories of the past.

The power to educate is sharing our history, revealing the truths, and giving clarification to life. It might include the times in life, a way of life, the lessons learned, the treasures stored away or the social journey in life. If people don't know who they are or where they have been, how will they know how to plan for the future?

Writing Your Life History lessons focus on a particular aspect of one's life such as home, hometown, family, childhood and school. The lessons include the statements, questions, writing exercises and resources to complete a select number of stories or a complete life history.

Writing Your Life History educates students in organization, outlining and preparing a time line. It also assists in interviewing techniques, writing description, dialogue and the time and place of an event or experience.

Writing Your Life History is a diverse learning opportunity. It provides the basics of writing history, allows students to choose what detail to include and is adaptable to students with different life and learning styles.

## Project Connects Students with Experts in the Field

Brian R. Shmaefsky, Partner Author  
Biology and Environmental Sciences  
Kingwood College  
Kingwood, TX  
bshmaefs@nhmccd.edu

Most students finish the semester with loads of facts and wisdom about the various subjects they completed. However, few students come away from a class with any insight about the people who are currently developing the field of study.

A simple activity can be conducted to provide students with this insight. It entails researching a particular facet of the discipline and then e-mailing people currently working in the discipline area. For example, students in a biology class may initiate contact with a geneticist investigating a human disease. English students can pry into the mind of a professor studying the writings of Katherine Ann Porter or a journalist working for the *Washington Post*.

This assignment must be structured so that students are aware of the goals of the project and have enough time to complete the project.

### Procedure

The first goal of the assignment is for students to use the Internet to research a current topic pertinent to the information covered in the course. You may wish to provide students with a list of possible topics. It's more structured for students if the topics follow the organization of topics presented in the textbook or the syllabus. The next goal is to have students use the information to identify and locate people working in the topic area. They should then e-mail the person to gather information about the person's motivations for pursuing that

subject as a career.

It's helpful to provide students with the following steps:

- Select a topic approved by the professor.
- Do a topical Internet search.
- Use the Internet to research people in the topic area.
- Find the e-mail address of several people.

Next, compose a letter to these prospects requesting the following information:

- What interested you about the subject?
- What projects are you currently working on?
- What are your future directions of inquiry?
- What career opportunities are available in that subject?

Finally, other queries may be suggested or left up to the students. Complete the following:

- State in the letter a reply time line to encourage an expedient response.
- Show the letter to their instructor before e-mailing.
- Once approved, send it.
- Do not send the letter as a spam; title and send it individually to each person.
- Wait for replies and respond with a "Thank You."

Reinforce the fact that the students may not get any responses or the people may respond slowly to the que-



▲ Connect your students to the hidden experts who are the driving force behind progress in their fields.

ries. Encourage the students to search for people who are at smaller universities and establishments. I even recommend directing queries to graduate students. Experience with this project shows that people at smaller institutions and graduate students are more likely to reply.

It's also important to encourage the students to have their letters written before the middle of the semester. This provides enough time to wait for responses and search for more prospects if no responses arrive from the first mailing.

### Evaluation

Students should be evaluated on whether they completed the project and how much information they collected from the search and the people being questioned.

Most of the students who completed the project were excited to hear from people who contributed to the content of the information covered in class. In addition, communicating with people in the field made the students more interested in the course content. In one biology class a student secured a position as research assistant with an investigator he contacted for the assignment!



Penny Shrawder  
Artist, Coeditor



Jack H. Shrawder  
Publisher, Coeditor

## Add Variety to Learning Evaluations

There are many alternatives to the traditional work-alone, in-class, multiple-choice, true-false and essay question evaluations. Here a few alternatives you might consider:

- Oral questions either done individually or in a team game structure.
- Take-home exams with written, oral, or multimedia response options.
- Knowledge summaries—students summarize what they have learned and demonstrate how to put it to use in a practical situation.
- Collaborative tests—students work in groups or teams.
- Journals, portfolios, project critiques and self-evaluations.
- Troubleshooting procedures to determine faults in a system.

We have been busy creating new things for you—a new web site, a new PowerPoint show, Introduction to TFS and new TFS QuickCourses. Please visit the new <http://teachingforsuccess.com> to get the latest news.