



## Death by Paper: Ten Secrets for Survival

By Frances S. Johnson, Rowan University,  
NJ  
johnsonf@rowan.edu

Numerous researchers have identified the correlation between writing and thinking. Others have explored the complexities involved in the writing process. Despite the volumes of research that document the multiple benefits that accrue from writing, many faculty are reluctant to assign much, because if assigned it must be graded. Getting out from under the piles of research papers, reflective essays, reaction papers, and journals can be daunting. Electronic media expedites student writing, but what appears in blogs, wikis, and Web discussions needs a response. In the past 20 years as a writing teacher, I have found several techniques that can help faculty in any discipline use writing to achieve its many benefits and still manage the paper load.

### 1. Grade with a timer.

Set it for 10–15 minutes. When the bell goes off, write final comments and then move on. This activity can help train you to be more mindful of your time and keep you focused. In most instances, after spending 15 minutes with an essay, you already have a grade in mind.

### 2. Read the whole paper, but correct and line edit only a few paragraphs. Leave the rest unmarked—read, but unmarked. Add a final comment.

Correcting every grammar, content, and punctuation error is you doing the student's work for him or her. Correct a short section of the paper. Ask the student to do the rest and come to your office with the revisions.

### 3. Use minimal marking.

Minimal marking is a system for grading that puts a great deal of the responsibility for corrections and revisions on the student. Instead of putting in commas, fixing sentence errors, or addressing other mechanical problems, put a check on the line to indicate that a problem exists there. Save your comments for matters of substance.

### 4. Make and use a rubric.

Providing a rubric for the writing assignment benefits you and your students. Creating it forces you to think of the major and minor elements of the assignment, and to clarify any hidden expectations you have. You can assign points to criteria, use a scale of poor to excellent, or just use check minus, check, and check plus. In addition to saving time, a rubric makes your grading more effective and focused. Rubrics also benefit students: knowing what's expected helps them to prepare the assignment.

### 5. Write a letter or memo to the class about the strengths and weaknesses of the papers.

Often many students experience the same problem with an assignment. In report writing, the formats may be incorrect. Documentation may be a problem. On the other hand, maybe everyone wrote a particularly good thesis statement. Effective feedback addresses both strengths and weaknesses. Take all those comments you would normally write 20 or so times and put them in a letter addressed to the whole class.

### 6. Make positive comments on one side of the paper and negative comments on the other.

Ample research documents that instructors make many more negative comments than positive ones. Not only that, but the negative comments are much longer, while positive comments are brief ("good job"). If you write negative comments on one side of the paper and positive comments on the other, you will become conscious of how your comments are proportioned and make adjustments.

### 7. Scan the papers and sort into three stacks: very good, average, poor.

A quick read can tell you a great deal. This fast review of writing with no marking is called holistic reading. Its helps you make an early evaluation of the paper's overall quality.

PAGE 3

## In This Issue

Learning the Lessons of Silence . . . . .	2
Is There a Place for Games in the College Classroom? . . . . .	3
Summer Reading: <i>Learning and Motivation in the Postsecondary Classroom</i> . . . . .	4
<i>My Freshman Year: What a Professor Learned by Becoming a Student</i> . . . . .	5
<i>Putting Students First: How Colleges Develop Students Purposefully</i> . . . . .	6
Critical Thinking: It's a Hard Skill to Teach . . . . .	6
In-Class Writing: A Technique That Promotes Learning and Diagnoses Misconceptions . . . . .	7
Getting to Know Your Students: Three Challenges . . . . .	8

**Editor**

Maryellen Weimer, Ph.D.

Penn State Berks Campus  
P.O. Box 7009, Reading, PA 19610-7009  
Phone: 610-396-6170  
E-mail: grg@psu.edu

**Magna Editor**

Rob Kelly  
robkelly@magnapubs.com

**President**

William Haight  
whaight@magnapubs.com

**Publisher**

David Burns  
dburns@magnapubs.com

**Editorial Content Director**

Bob Bogda  
bbogda@magnapubs.com

**Creative Services Manager**

Mark Manghera

**Customer Service Manager**

Mark Beyer

**For subscription information, contact:**

Customer Service: 800-433-0499  
E-mail: [custserv@magnapubs.com](mailto:custserv@magnapubs.com)  
Website: [www.magnapubs.com](http://www.magnapubs.com)

Submissions to *The Teaching Professor* are welcome. When submitting, please keep these guidelines in mind:

- We are interested in a wide range of teaching-learning topics.
- We are interested in innovative strategies, techniques, and approaches that facilitate learning and in reflective analyses of educational issues of concern.
- Write with the understanding that your audience includes faculty in a wide variety of disciplines and in a number of different institutional settings; i.e., what you describe must be relevant to a significant proportion of our audience.
- Write directly to the audience, remembering that this is a newsLETTER.
- Keep the article short; generally between 2 and 3 double-spaced pages.
- If you'd like some initial feedback on a topic you're considering, you're welcome to share it electronically with the editor.

The *Teaching Professor* (ISSN 0892-2209) is published monthly, except July and September, by Magna Publications, Inc., 2718 Dryden Drive, Madison, WI 53704. Phone: 608-246-3580 or 800-433-0499. Fax: 608-246-3597. E-mail: [custserv@magnapubs.com](mailto:custserv@magnapubs.com).

One-year subscription: (U.S.) \$79. Outside the U.S.: \$89. Discounts available for multiple subscriptions (please call for price quotes). Periodicals postage paid at Madison, WI. POSTMASTER: send change of address to *The Teaching Professor*, 2718 Dryden Drive, Madison, WI 53704. Copyright © 2006, Magna Publications, Inc.

Back issues cost \$20.00 each. A specially-priced collection of previous year's issues with index and official Teaching Professor 3-ring binder is available for \$59.00 plus shipping and handling within the US. We accept MasterCard, VISA, Discover, or American Express. To order, contact Customer Service at 1-800-433-0499.

Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by The Teaching Professor for users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that 50 cents per page is paid directly to CCC, 222 Rosewood Drive, Danvers, MA 01923; Phone: 978-750-8400; [www.copyright.com](http://www.copyright.com). For organizations that have been granted a photocopy license by CCC, a separate system of payment has been arranged.

## Learning the Lessons of Silence

By Faye Marsha G. Camabalan, Indiana  
*University Southeast*  
[fcamabal@ius.edu](mailto:fcamabal@ius.edu)

"The lessons of silence." I found these four words in Lao Zi's book, the *Tao Te Ching*. I have been ruminating over them lately. In our modern society more and more individuals fear stillness. In our classrooms, fewer students appreciate the sound of silence. Their faces light up when I give animated lesson presentations but wilt whenever I ask them to pause and think about the ideas we have just considered. Outside my classroom, I seldom see them minus headsets, earphones, or cell phones. They (and some of the rest of us) have yet to learn that the most profound ideas are born in moments of silence.

In my teaching, it is in the moment of silence that I come to understand whether or not students are learning. It is when the whole class stares at me in silence that I realize I need to rephrase my question. It is when a student pauses while reciting that I see that some concepts I've taught are not yet clear. It is when a student does not say anything but smiles sweetly that I know my ideas made an impression. It is in the silence of my classroom after the last student has left when I reflect on my own teaching that I better understand how to affect their learning. It is in the silence of my office after typing the last sentence of my manuscript that I learn to think deeply about what I have just written. There is an analogy that perfectly captures all of this for me: it is the silence that follows the first four notes of Beethoven's Fifth Symphony. Those notes are meaningless unless one appreciates the sound of silence that surrounds them.

Deep learning is a product of profound reflection. With the myriad of learning theories, there is one thing of which I am certain of—knowledge is constructed and not received. Even the behaviorist Skinner made it clear that behavioral psychology does not promote passive knowledge. Instead, it advocates the idea that knowl-

edge in the form of behavior or action can be shaped and conditioned. And with the shaping and conditioning, knowledge is constructed. The process of knowledge building is internal. It happens when students think reflectively. Teacher talk may prompt that reflection, but it happens best in times of silence.

In my lectures, I always integrate the meditative philosophies of yoga and Tai Chi. Students usually relate to these two examples and start to realize that learning is not all about the noise, but also about the power of silence. To illustrate that there is learning in stillness and silence, I stop talking and give them time to think, reflect, and write down questions they have about a discussion topic. I have them do this at different times: at the start or at the end, or even in the middle of a class discussion. To assess their learning, I challenge students to do more than add up their scores like a cash register. I want them to process the feedback they have received. After handing out graded papers and while student are still in the classroom, I give them time to read the marginal notes on their papers in silence. I encourage them to consider how this feedback can help them do better next time. Then I ask volunteers to share with the class what they have learned about themselves.

Students lead busy, stressful lives—silence can relieve that stress and change the climate in the classroom. My efforts to teach students the lessons of silence have had some positive results. Students understand situations better. They feel more confident about their ability to cope and so they respond more thoughtfully and less emotionally. I have fewer students whining, dismayed, confused, and panic stricken and more students acting like confident, empowered learners. ♥

## Is There a Place for Games in the College Classroom?

By Stacey Beth-Mackowiak Ayotte, *The University of Montevallo, AL*  
AyotteSB@montevallo.edu

It is not always easy to get each student to participate on a daily basis, but I've found that when I incorporate games into the classroom, new attitudes emerge and new personalities blossom. Those once inhibited learners open their mouths and contribute to the class. Because I teach a foreign language, participation and involvement may be more important for my students, but I still think there's a place for games in many disciplines. I use games as warm-ups at the beginning of class and as ways for students to get to know each other. They are an effective review session tool as well. When my students are out of their seats gathering information, they are more motivated and willing to present their findings. If there is a prize at stake or simply the designation "winner," the competition becomes cutthroat. Let me illustrate with some examples.

Frequently I use the game of Jeopardy to help students review for an upcoming exam. I select different categories with material appropriate for review (vocabulary, verb conjugations, culture, idiomatic expressions, numbers, etc). In other courses the categories might include important figures, key terms, important events or discoveries, theories or principles, processes or functions, etc. I divide students into teams so that they compete as groups rather than as individuals. My goal is to create a cooperative learning environment where individuals easily overwhelmed in front of their peers will feel less pressure and are more likely to contribute. When students work together as a team, a sense of solidarity results. By the time final Jeopardy begins and the wagers have been written down, students have reviewed material from a given chapter or several. They are ready to be crowned winners and prepared for the kind of individual review they need to complete on their own.

I use group games to accomplish other

learning goals as well. Take, for example, a game I've dubbed "Verb Battleship" and a version of traditional bingo. For Verb Battleship, students are given a game board on which the infinitives of several verbs are provided down the left-hand column of the page. Across the top in the first row are the different subject pronouns. Depending on the recently taught verb form (present, subjunctive, pluperfect), the students are asked to select a verb and its correct form and then to properly conjugate it as a means of finding and destroying their opponents ships. The first student who seeks out and destroys his opponent's ships by correctly conjugating verbs is named the champion. I hear students calling out with enthusiasm, "Tu as coulé mon bateau!" (You sank my ship).

With bingo, students use a game board containing rows and columns of boxes, each filled with different criteria or situations. For example, they may need to find someone in the class who can define a particular concept or term, or use a certain part of speech correctly. They circulate around the classroom looking for students who fit the particular information in each box. The first student to find a vertical, horizontal, or diagonal line yells "bingo" and is named the winner. To verify whether a "true" bingo has been achieved, I ask the "winner" to explain his or her bingo line. I then follow up with each of the students named on the bingo line so that they can share with the class the correct answer or the desired term, date, concept, etc.

Learning a new language (whether it's a foreign one or the complicated language of many disciplines) is hard work and much of it isn't fun. Games like these offer a welcome respite. Often my students don't even realize they are learning the language because they are having so much fun. Games also shift the focus offered by the traditional textbook exercises and get students working and communicating with others in the classroom. When working on one of these games, my students eagerly

use the new language, enjoy participating, and beam with pride upon being named the "winner."

Games are not just fun for the sake of fun. They should be designed to reinforce or review topics covered in class, they should be organized, and they should be used to add variety to our college classrooms. As for the answer to the question in the title—I say yes, resoundingly, and gently remind that even faculty who've been around a while aren't too old to have some fun with games. 🍀

---

### DEATH BY PAPER

FROM PAGE 1

#### 8. Select one to three major problems to comment on.

Many teachers think they need to point out every flaw and problem with an assignment. This is not only unnecessary, it frustrates students. They become confused and don't know what to fix first. Comment on the major issues in a paper or report. Give clear instructions for revision. Leave the rest alone.

#### 9. Reduce your comment wording.

Try learning to write shorter phrases like "Needs development," "Needs a clear focus," "Needs a 'so what,'" or "Lacks required sources." This strategy has the added bonus of adding a level of consistency to your grading.

#### 10. "See me briefly."

Many times it is more efficient to explain something verbally than it is to write it down. It may take me a long time to explain that I assigned an argument and received a report, or that the experiments in the lab report were incorrectly performed. Telling the student that not only saves you time, but also it allows the student to ask you questions. Students grasp the problem better after even a short conversation. 🍀

## Summer Reading: Three Excellent Books

**Editor's note:** *In this, our summer newsletter issue, I'm summarizing material from three excellent books. I hope the summaries accomplish two objectives: first, that they give you new and relevant information helpful to your continuing efforts to grow and develop as a teacher, and second, that this information will be intriguing enough to motivate you to read the whole book. Good summaries are thumbnail sketches—they offer the essence, but these books (and other books and articles reviewed in every issue of the newsletter) contain much more. Most faculty do so little pedagogical reading. Obviously, if you regularly read the newsletter you do more than most and deserve commendation for your efforts. But there is so much good pedagogical material available and so little of it is accessed. I do all I can here to persuade you to gift yourself, your teaching, and your students with some good summer reading.*

### **Learning and Motivation in the Postsecondary Classroom**

By Marilla D. Svinicki

Published by Anker, 2004, 263 pages

Order at [www.ankerpub.com](http://www.ankerpub.com)

Learning is a popular subject now, but Svinicki was writing about it long before this recent wave of interest. She brings to this book her educational background in psychology (she knows the research on learning well) and years of experience working with faculty on instructional issues as director of the Center for Teaching Effectiveness at the University of Texas-Austin. It's a powerful combination that has produced a book that condenses, distills, and makes accessible complicated research work on learning. But Svinicki does much more. This book tells you in very practical ways how to apply the principles of learning in the classroom.

Chapter Nine, "Putting it All

Together," sets forth 10 principles of learning that are described in detail through the book. Here are those principles, very briefly described. In each chapter they are applied to a specific course, providing a compelling illustration of the principles in action.

**Principle 1: Emphasize a Few Key Ideas**—These central ideas, as in the most important material to be learned, need to be highlighted and stressed across the entire course as well as in each class session. Note that the key ideas are few in number—meaning that if you use too many, less learning results.

**Principle 2: Be Aware of Prior Knowledge**—“If there is one thing that all psychologists can agree on, it is that prior knowledge and experience affect current behavior and learning.” (p. 27) Learners consistently try to connect what is new with what is known.

**Principle 3: Tap into Motivational Sources**—Motivation powers the learning enterprise, and teachers can do much to influence its affects on students.

**Principle 4: Build Structural Knowledge to Achieve Understanding**—The idea here is that “knowledge is retained only when embedded in some organizing structure,” (p. 40) as one well-known researcher remarked. Teachers have to help beginning learners build that structure so that they have some place to hang and then find new knowledge.

**Principle 5: Structure Learning to Support Encoding of the Content**—Svinicki asserts that this is the most critical part of the learning process. “Failures here are essentially failures to learn. Unless new information can be incorporated into the learner's long-term memo-

ry, it will not be available for future use.” (p. 24) Teachers must design instruction that supports encoding.

**Principle 6: Use Modeling to Teach Skills**—Basically, skills are learned via the venerable model of learning: apprenticeship. Beyond that, “deciding what to model is as important as how to model it.” (p. 74)

**Principle 7: Give Lots of Active, Coached Practice**—“We want them to be able to recall and use the information effortlessly so that they can exert their mental energies not on recall, but on expanding their understanding.” (p. 32) That goal can only be accomplished if students have lots of opportunities to practice.

**Principle 8: Teach in Ways That Promote Transfer**—Here the objective is to enable students to transfer what they have learned to new and novel situations. (p. 99) The way in which the material is taught can expedite that process. Among several suggestions: teach the skill just before students have the opportunity to use it. (p. 106)

**Principle 9: Help Students Become Aware of Their Own Learning Strategies**—Learning is essentially an individual activity. It cannot be done for someone by someone else. If prowess as a learner is to develop, then teachers must enable students to encounter themselves as learners.

**Principle 10: Respect Individual Differences in Learning**—“By respect, I don't just mean tolerance of differences. I mean building into the class some flexibility about how each student approach[es] learning.” (p. 229)

### ***My Freshman Year: What a Professor Learned by Becoming a Student***

By *Rebekah Nathan*

Cornell University Press, 2005, 187 pages

Order at [www.cornellpress.cornell.edu](http://www.cornellpress.cornell.edu)

You won't have read another book like this one, guaranteed. Rebekah Nathan (a pseudonym, for reasons explained in the book), an anthropology professor at a large university (not identified), took a sabbatical and enrolled in her university as a first-year student. She moved into a residence hall, took classes, observed, and interviewed students. She made this unusual move because after 15 years of teaching, she felt increasingly confused and frustrated by the students in her classes. They rarely stopped by during office hours, didn't take much in the way of notes when she presented material, and sometimes brought whole meals to class. This book reports her experiences and what she learned. It's a book that every faculty member ought to read, including those who have been teaching less than 15 years.

Nathan writes ethnography as an anthropologist. Her eye catches details that at first pass seem too small to really matter, like what students post on their dorm-room doors or write on the graffiti boards that hang there. The individual messages aren't the point (although the examples reported will give middle-aged faculty members some pause), but from them and other small details Nathan creates a portrait of student life. It's not a picture that conforms to most faculty and institutional perceptions of student experiences living on campus. Most of us think that's the ideal way for students to experience the academic culture, the very best way for them to develop a strong network of friends and activities that will cause them to persist until graduation. In

fact, Nathan discovered that even among students sharing the same residence hall, living on the same floor, a sense of community was often lacking. She found student lives to be enormously complicated. Most worked at off-campus jobs and retained time-intensive connections with family and friends. Efforts by the institution to foster community and promote the academic culture often failed—the freshman seminar provides one particularly compelling example in the book.

What makes the book so persuasive is that Nathan doesn't make points explicitly. She simply describes what happened, how the students she observed experienced it, and how she experienced it. One can't read this book without being impressed at how different things look from the student perspective.

In a near-final chapter on the lessons learned, Nathan writes about how she came to understand why students so often appear clueless in class. Teachers spend time on classes between classes. To prepare for class Thursday, they review what happened on Tuesday. The content for that course frequently relates to content being taught in other courses, or in other sections of the same course, and faculty teach these content areas regularly. Students take four or five totally different courses. Between Tuesday and Thursday, they've been to these classes and done assignments for all of them (assuming students are taking the coursework seriously), and they have worked at their jobs and taken part in several social activities. Here's how Nathan describes what she learned: "My course, I've come to realize more keenly, is just one of the many balls being juggled in the time management challenge faced by each student." (p. 136)

Based on her experiences, Nathan came to conclude that most faculty and administrators think academics play a

much larger role in student life than they in fact do. Those of us who live in the academic side of the house magnify the impact of teachers and classes. She contrasts this assumed importance with evidence collected by graduate student researcher who queried students at Nathan's university as to the reasons why they were continuing as students. Faculty was one of the least frequently mentioned reasons. In this same survey 80 percent of the students reported that they interacted with campus friends on a daily basis. A "significantly smaller percentage" reported interactions with faculty, academic advisors, and other college personnel on a monthly basis.

The content of this book answers some of the questions individual faculty may have about students, but it also begs to be discussed by faculty within a discipline and across an institution, as well as by those who make and implement policies that pertain to the student experience. It's one of those books that enables you to see things from a different viewpoint.

### ***Putting Students First: How Colleges Develop Students Purposefully***

By *Larry Braskamp, Lois Calian*

*Trautvetter, and Kelly Ward*

Published by Anker, 2006, 246 pages

Order at [www.ankerpub.com](http://www.ankerpub.com)

This book and Nathan's *My Freshman Year* would make a dynamite discussion duo for faculty groups interested in thinking about student development—from both the classroom and institutional perspective. *Putting Students First* reports findings based on case studies of 10 different church-related colleges and universities. These are all schools where

PAGE 6 •

## SUMMER READING

FROM PAGE 5

the aim is to develop students holistically, to address the intellectual, moral, psychological, and faith growth of students. “They press students to acquire knowledge and to develop a life of purpose...” (p. 1) Putting students first in this context does not mean responding to whatever demands students may present. Rather, it means that faculty and other influential adults in the lives of students put their holistic development first, making its development the result of intention. “They educate and work with student on purpose, not accidentally.” (xvii)

Why study church-related colleges? There are a significant number of them: 900 out of the 6,500 higher education institutions in the United States. Some of them have neglected their historical roots, but many are finding their way back to them. However, the authors note, “Our intention is not to proselytize or to suggest a greater role for religion in higher education, but to argue that studying the colleges that we did has implications for all college campuses with respect to investing in students’ holistic development.” (p. 16) The authors also point out that most often higher education looks to the big-name

universities to set standards and to provide models worthy of emulation. In this case, they contend that church-related colleges provide exemplars of policies and practices that take student development seriously. Any institution interested in broad conceptions of student growth can learn from what these institutions are accomplishing.

Surveys and site visits produced the results used in this analysis of how student development is promoted at Behune-Cookman College, Creighton University, Hamline University, Hope College, Pacific Lutheran University, the College of Wooster, Union University, University of Dayton, Villanova University, and Whitworth College. Findings are reported in four general areas: culture (campus ethos), curriculum, cocurriculum (those activities designed to connect in-class learning with out-of-class experiences), and community.

The final chapter identifies three major characteristics of colleges where students are developed holistically. Each is listed and described briefly here. In the book, a set of “calls for consideration and action” accompany each, as well as questions that can be used to stimulate campus conversation about the issues.

**Mission Is Reality, Not Rhetoric**—“At the institutions we visited, a mission statement is more than a line in a catalog...Rather, the mission is rooted in the college’s tradition and continuously guides the campus community in its sense of direction. It is alive, working, and evolving.” (p. 194) Leadership is seen as critical in creating campus cultures that reflect the mission and faculty are seen as the group that keeps the mission “alive on a daily basis inside and outside the classroom.” (p. 196)

**Learning and Development Are Integrated**—At the institutions studied, the college experience is seen as fostering both learning and development. “These colleges purposefully create environments that are committed to nurturing the heart as well as developing the mind.” (p. 200)

**The Campus Community Foster Support and Challenge**—“The notion of community is very strong at these colleges. Community is important because it provides comfort and support when sadness, failures, and tragedies occur in life.” (p. 205) But community also provides a safe place where beliefs can be challenged, where different views and perspectives can be considered and respected. ●

## Critical Thinking: It’s a Hard Skill to Teach

Are there any faculty members who don’t aspire to teach their students to think critically? For most of us it’s a given: critical thinking is one of the skills we would most like students to take from our courses. And yet most of us would also admit that teaching this skill is hard, and some students leave without having mastered it.

In a truly excellent summary and explanation of what cognitive science contributes to our understanding and efforts to teach critical thinking, van Gelder identifies six lessons that can help our students develop their ability to think critically.

### Lesson 1: Critical Thinking is Hard

Even though it’s basic, critical thinking depends on a complicated process. Van Gelder uses this analogy to illustrate: “like ballet, critical thinking is a highly contrived activity. Running is natural; nightclub dancing is less so; but ballet is something people can only do well with many years of painful, expensive, dedicated training. Evolution did not intend us to walk on the ends of our toes, and whatever Aristotle might have said, we were not designed to be all that critical either.” (p. 42)

For teachers, this means there are no shortcuts, no magic bullets, and no tech-

nological solutions. We should expect our students to develop this skill slowly. “Critical thinking is more of a lifelong journey than something picked up in a two-week module.” (p. 42)

### Lesson 2: Practice Makes Perfect

Even though it’s hard, some people end up being able to do it well. How do they achieve that goal? Plain and simple, they practice. It is not enough to learn about critical thinking, although this helps (see lesson 4). It is not enough to be exposed to

PAGE 7 ●

# In-Class Writing: A Technique That Promotes Learning and Diagnoses Misconceptions

By William S. Altman, Broome Community College, NY  
altman\_w@sunybroome.edu.

Instructors need to gauge students' comprehension and to discover what misconceptions they internalize as they learn. Unfortunately, the discovery of what students don't understand emerges later, when we give examinations. By then it's often

difficult to remedy those incorrect ideas or approaches. I would like to share how I've adapted a technique so that it addresses this problem and accrues other benefits.

I begin each class with a quotation, musical excerpt, or short video clip germane to the day's topic and give the students a minute or two to write about it. This engages their attention and prompts them to think about the subject before our

discussion begins. I begin my presentation by asking students to share some of what they've written, and then I use their remarks to scaffold to the more complex concepts I want to cover.

At the end of class I give the students another two minutes to reflect on and summarize their understanding of the material

PAGE 8

## CRITICAL THINKING

FROM PAGE 6

good examples, even though the instructional practice of many faculty is predicated on the assumption that student learn by imitation. Of teaching critical thinking by example van Gelder writes, "These strategies are about as effective as working on your tennis by watching Wimbledon. Unless students are actively doing the thinking themselves, they will never improve." (p. 43)

Fortunately cognitive science research has identified the characteristics of practice that enables people to become good. It is practice done with full concentration and an overt commitment to improvement. It is practice not just of the skill generically but practice of each individual part that makes up the skill. It is practice that is developmental—it gradually gets harder as more and more of the skills are mastered. It is practice accompanied with close guidance and accurate feedback.

### Lesson 3: Practice for Transfer

When learning a new skill, like critical thinking, transfer is a problem. The skill is learned and applied in a specific context. Because the skills we teach we have learned so thoroughly and apply so regularly, we cannot imagine not being able to transfer the new skill from one situation to another. If students know how to do problem A, they should be able to use that knowledge to solve problem B. We are surprised when

they can't and disappointed that they only want to solve problems exactly like the ones they first mastered. We have forgotten that it was through deliberate practice that we learned to transfer skills from one situation to another.

### Lesson 4: Practical Theory

The analogy is that a person can enjoy beer without knowing much about it. But learn a bit about beer and you come to appreciate it even more. With critical thinking, van Gelder goes even a bit further. He doesn't think students can improve their critical thinking beyond a certain point without knowing some theory. Learning something about critical thinking as an entity in its own right allows students to perceive much more of what's going on. This doesn't mean that theory alone will carry the day. Practice is essential but "a bit of theory is like the yeast that makes bread rise. You only need a small amount relative to other ingredients, but that small amount is crucial for a good loaf." (p. 44)

### Lesson 5: Map it Out

At its core, critical thinking rests on arguments, and arguments are expressed in sequences of words that become sentences and then paragraphs of collected thoughts. But arguments can also be expressed diagrammatically. The process is slow and cumbersome, but for students learning how to think, it enables them to see the reasoning, identify the important issues,

check for assumptions and look for the presence of supportive evidence. Again cognitive science contains some compelling evidence that critical thinking skills improve faster when students use argument mapping techniques.

### Lesson 6: Belief Preservation

The problems here involve those cognitive biases and blind spots that derive from those beliefs we strongly hold. In that case, we use evidence to preserve our opinions rather than starting with the evidence and letting it guide us to sound opinions. When we start with strong beliefs, we look for evidence that supports what we believe and ignore that which goes against them. We decide whether the evidence is good or bad depending on whether it supports our beliefs. And we stick with those beliefs even in the face of overwhelming contrary evidence. Good critical thinkers understand this tendency, actively monitor thinking and deploy compensatory strategies.

Some of these lessons we already know—others may be new. But the lessons together remind us that critical thinking is not an automatically acquired skill. We can and should rededicate ourselves to those activities that will help our students to learn this most important skill

**Reference:** van Gelder, T., (2005). Teaching critical thinking: some lessons from cognitive science. *College Teaching*, 53 (1), 41-46. ♥

## Getting to Know Your Students: Three Challenges

Several articles in this issue (as well as Slots of material previously published in the newsletter) directly and indirectly reaffirm the importance of getting to know (as in understanding) your students. As important as that understanding is, Dean A. McManus shares three facts that make it a goal full of challenges.

At the beginning of a teaching career, students approximate the age of younger siblings. They are somewhat like us. But as the years pass, that changes. Pretty soon students look and act pretty much like our own children. Very shortly after that they are the age of our grandchildren. The age of the students we teach may stay the same, but as we mature the realities of the world of the 18-year-old college student (assuming your students are in that age cohort) become ever more distant and ever

more difficult to decipher and understand.

For those of us who have been teaching for a number of years, something else about students attending our colleges and universities has changed. They now come from much more culturally and ethnically diverse backgrounds. Back when we attended college, most of our colleagues looked like us. A certain kind of student attended college in those days. But that time has passed. Now students come to college from all walks of life. They come with different goals and they come with life experiences totally unknown to many faculty members. Getting to know students today requires learning about people and lives unlike our own.

And finally, students don't learn as we do (or as we think we do or did). "Research on learning suggests that students do not

just accumulate knowledge but construct [it] by restructuring their existing knowledge to incorporate the new information..." (p. 147) It requires effort to understand how students learn—we are quick to conclude that their methods are not as effective as ours. Sometimes we're right, but sometimes we just want students who think like we do...they are so much easier to teach.

Getting to know students (individually and collectively) takes time and effort. Understanding them begins with recognizing those areas where the differences exist.

**Reference:** McManus, D. A. *Leaving the Lectern*. Bolton, Mass.: Anker, 2005. 🍀

### IN-CLASS WRITING

FROM PAGE 7

and to record their sense of how it relates to previously learned material. They may also write comments about the class or direct questions to me about anything not yet clearly understood. You may recognize this technique: it has been used in many venues and in a variety of different formats.

I use this student writing as a diagnostic tool to help me judge how well students individually and collectively comprehend the course material. If many students misunderstand a particular point, I address it in the next class session; if only one or two have questions, I respond directly on their papers, which I return during the next class. When students show a particularly good grasp of the material, make an interesting point, or show growth in their understanding, I write appropriately encouraging or challenging responses. In fact, this interchange of writing often becomes another conversation, not completely dry and factual, but frequently incorporating a good deal of humor or whimsy. In some cases we have traded sto-

ries, jokes, or poetry. Several of my more visually oriented students have drawn quite elaborate illustrations, to which I sometimes respond in kind, with my own pathetic attempts at drawing.

I get excellent compliance on this exercise by making it a small part of the class participation grade. Each day's writing earns an A; each not turned in, an F. Although the entire semester's writing exercises contribute only a tiny percentage of the final grade, the idea of getting an A every day is a real motivator for many students. Additionally, although I didn't originally create this writing exercise as an attendance-taking technique, it can also serve that purpose.

My use of this technique has evolved during the years I have used it. Early on I had students submit their papers anonymously. I began asking my students to add their names when my college required me to take attendance. I discovered that this gave me the chance to respond directly to students, thereby increasing how well the technique promotes individual learning.

The amount of writing the students generate may suggest that this strategy will

only be feasible in small classes, but this is not necessarily the case. My classes at Broome Community College are limited to 28 students, but I have successfully employed this strategy at Cornell University, SUNY Cortland, and Ithaca College, where my classes ranged between 90 and 140 students. The key is that you are not required to read in-depth, only to skim the papers, responding as needed. The motivational/attendance aspect of the assignment is satisfied simply by looking at the name on each paper and checking it off on the attendance roster—in my case, a Quattro spreadsheet that automatically calculates the appropriate credit in students' grades.

This technique gets students interested in and thinking about course topics before you start discussing them, offers a way for students to consolidate the day's learning and ask direct questions about what they do not understand, and encourages regular class attendance. It offers instructors a way to gauge learning and correct misunderstandings before they become solidified, with a minimal investment of time and effort. 🍀