Understanding What You See Happening in Class

While conducting a class, even though teachers may be doing all or most of the talking, students communicate important nonverbal messages. They communicate these messages through facial expressions, body postures, and how they say what they say, as well as what actions they do or the skills they attempt to perform. Both novice and expert teachers see the same student responses, but expert teachers see in those responses something very different than novices see. Research summarized and referenced in the article below identifies four features that distinguish how expert teachers see what transpires in class. As the authors note, the good news is that teachers are not born experts. Rather, the ability to see and respond to this kind of feedback can be learned. The four features and suggestions for developing expertise in each are highlighted below.

Focus on the relevant — When an expert teacher looks at what students are doing, he or she focuses on events and information relevant to the decisions that must be made as a teacher. So if the students are learning to play tennis, that teacher attends to how the student swings the ball. Novice teachers notice extraneous details such as how students are dressed, whether they look like they are enjoying the activity, and if they are talking to other students. To help them focus on relevant details, the authors suggest that teachers might refer to a checklist that identifies those student responses relevant to how well they are learning.

Raw inference from observations — Based on what they see, expert teachers make good judgments about which subsequent activities will interest students and improve their performance, if what's being taught is a skill or if the students' understanding of what's being taught requires a cognitive response. One excellent way to develop this ability to see what's happening and use that knowledge to plan next events is to partner with a teacher who does it well. "The technique requires the person to verbalize his or her thought processes. It may be awkward at first, because verbalizing a thought takes considerably longer than only mentally processing a thought." (p. 31) The reverse of this technique may be equally instructive. If the novice teacher explains what he or she sees and what conclusions she or he has drawn about next steps, then the expert can point out differences.

Tuning into the atypical — Experienced teachers know how students typically respond when learning a particular technique or grappling with a particular part of the content. If an individual student or a group of students responds differently, expert teachers automatically tune in to what's happening with those students. This is true whether the student is struggling or excelling. If a student learns something with great ease, perhaps that approach would be of benefit to others. Part of what helps novices develop expertise here is their explicit attempt to understand how and why something works for students. If a particular set of exercises moves students to a new skill level, teachers need to know why. "Teachers will need patience as they are learning to see—which means they will not immediately understand what they see. With deliberate practice, teachers will make better sense of instructional situations and become adept at finding potential in the unusual."

Developing a critical eye — The objective here is to use what is seen to implement improvement and to always consider ways to do it better. It is almost as if experts don't know they are expert. Their efforts to improve are even more relentless than those of novices. Key to success here is the ability to analyze what's happening, to thoughtfully consider what one sees. The dynamic milieu of the classroom does not afford time for scholarly reflection, but events can be noted and then more carefully thought about later.

"To improve in teaching, teachers must deliberately practice their teaching skills." (p. 32) Teachers are not born understanding what is happening as students attempt to learn. Moreover, they can see something happening time and again, but that does not mean they will come automatically to understand it. The effort must be deliberate. The effort is work making because, "Unless you understand what you see, your class might as well be invisible." (p. 29)


What Teachers Learn When They Take Classes

Given teaching loads and the regular demands of academic life, it’s not realistic to expect teachers to take classes, but when they do, what they learn about teaching is extraordinary. This is the first account we’ve shared in the newsletter; it probably won’t be the last. There are important lessons to be learned from the experiences of others.

M arshall Gregory, a professor of English with some years of experience behind him—we have highlighted other of his pedagogical publications in previous issues—recently took an undergraduate Shakespeare acting class.

“If I live for a hundred years, I will never forget the exercise of being rolled back and forth on a gym mat by under-graduate women while I recited my soliloquy from Hamlet using only vowels, no consonants. This exercise was the death-blow to any shred of dignity that I might have tried to fake as a wise old owl hanging out among a flock of fluttery under-graduate songbirds.” (p. 309)

The article contains a lengthy discussion of four learning tactics used in acting class that Gregory thinks have application in arts and humanities classes, but highlighted here are three lessons Gregory learned about teaching through this experience.

The first he labels “the value of first-hand incompetence.” When teachers walk into a classroom, they are the smartest and most competent people present in relation to the content. They have studied its minutiae for years and know intimately more details than students will begin to grasp in their nine- or 15-week journey through the material.

Teachers quickly forget what it feels like to enter a classroom knowing virtually nothing about the content. They have already known four answers, all of which we ask students questions to which we ourselves are reluctant to display incompetence, limits, or questions they can’t answer, especially in front of students. Gregory learned that students are inspired by teachers who act more like learners and less like polished experts.

Finally, Gregory learned the power of “a true learning community.” Students in Gregory’s humanities classes (and he suspects the same for students in other humanities and science courses) don’t know each other the same way students in the acting class came to know each other. In acting class, students knew much more than each other’s names. They participated in activities outside of class. In class they supported each other.

Gregory admits that this kind of intimacy is hard to replicate in humanities and science courses, but he believes faculty need to work hard to achieve something close to it.

He has students introduce themselves to each other time and again—saying not just their names but offering information about their likes and dislikes, places of ori-
Problem-Based Learning: Benefits and Risks

Problem-based learning, that instructional approach in which carefully constructed, open-ended problems are used by groups of students to work through content to a solution, has gained a foothold in many quarters of higher education. Originally PBL, as it’s usually called, was used in medical school and in some business curricula for majors. But now it is being used in a wide range of disciplines and with students at various educational levels. The article (reference below) from which material is about to be cited “makes a critical assessment” of how PBL is being used in the field of geography. Side note: The article is an excellent example of a useful state-of-practice article and shows how all disciplines would benefit from this kind of assessment regarding how PBL and other instructional methods are being used by practitioners.

Much of the content is relevant to that discipline, but the article does contain a useful table that summarizes the benefits and risks of PBL for students, instructors, and institutions. Material on the table is gleaned from an extensive review of the literature (all referenced in the article). Here’s some of the information contained in the table.

Benefits of PBL
— For Students
• It’s a student-centered approach.
• Typically students find it more enjoyable and satisfying.
• It encourages greater understanding.
• Students with PBL experience rate their abilities higher.
• PBL develops lifelong learning skills.

— For Instructors
• Class attendance increases.
• The method affords more intrinsic reward.
• It encourages students to spend more time studying.
• It promotes interdisciplinarity.

— For Institutions
• It makes student learning a priority.
• It may aid student retention.
• It may be taken as evidence that an institution values teaching.

Risks of PBL
— For Students
• Prior learning experiences do not prepare students well for PBL.
• PBL requires more time and takes away study time from other subjects.
• It creates some anxiety because learning is messier.
• Sometimes group dynamics issues compromise PBL effectiveness.
• Less content knowledge may be learned.

— For Instructors
• Creating suitable problem scenarios is difficult.
• It requires more prep time.
• Students have queries about the process.
• Group dynamics issues may require faculty intervention.
• It raises new questions about what to assess and how.

— For Institutions
• It requires a change in educational philosophy for faculty who mostly lecture.
• Faculty will need staff development and support.
• It generally takes more instructors.
• It works best with flexible classroom space.
• It engenders resistance from faculty who question its efficacy.


Group Quizzes: More Positive Outcomes

We have previously reported on various iterations of having students do quizzes in groups. The study referenced below adds to the growing number of evidence-based reasons for doing so. Here’s how group quizzes were used in this study.

In an introductory sociology course (which was compared with a control section of the same course), students took eight unannounced quizzes that covered reading assigned for that day. After answering the three to five open-ended questions, students joined a group (formed by the teacher and with similar ability levels) in which they discussed their answers. After the discussion, they could revisit their individual answers. One quiz was randomly selected from each group and the score on that quiz became a group grade assigned to everyone in the group. Individual quizzes were also scored so that students could compare their individual and group grades.

Faculty researchers used quiz, exam, and final grades along with survey data to answer questions in three different areas. First, they wanted to know whether this style of collaborative testing would improve students’ learning, which they operationally defined as quizzes, exams, and final grades. Students in the experimental group did score significantly higher on the quizzes, but they did not score higher on exams or receive higher final grades. The Teaching Professor February 2007
Helping Students Take Stock of Learning

I find myself searching for assignments, activities, and other approaches that will make my students more aware of all that they are learning—not just content and its application, but those larger lessons that educational experience teaches more indirectly. I’m thinking about the importance of participation, of thinking critically, of respecting and learning from others, and of seeing that the responsibility for learning ultimately rests with the learner. My students are so focused on grades, points, what the teacher wants, and what they need to know for the exam that these larger lessons are learned without much conscious awareness.

I teach beginning students. Last fall they were all first-semester college students. They all start out optimistic, but soon, many start making poor decisions such as skipping class, not doing the reading, not participating or even paying attention, and missing small and then not-so-small assignments. For some, that first less-than-stellar grade feedback causes them to realize that success in college does require more than most had to deliver in high school. By then, though, they are behind on points, and even if they do start working in all the desired ways, they can’t do that well in the course. To help them out, I include some extra-credit assignments near the end of course. The students who haven’t yet woken up won’t be saved—most are still so oblivious or unconcerned about impending failure that they don’t take advantage of extra credit. I know, many faculty members have philosophical quarrels with extra credit, and so you may not want to use these as extra credit options. I think they would work just as well as short assignments or even as prompts for discussions that might occur as the course nears its end. What pleases me about these prompts is the way they promote reflection and seem to clarify for students important learning lessons.

— A friend of yours asks if he/she should take this course. Would you recommend it? Why? Why not? What would you tell students they should do if they want to do well in the course? Frequently I have students write this as a letter to their friend. They put it in a sealed envelope with their name on the front. I give them 10 points for doing the assignment. I read the letters after grades have been submitted. I am always a bit encouraged that even though many of these students have not done as well as they could have in the course, they do, by its end, know what they should have done and offer their friends really good advice. Hopefully, they will apply what they’ve learned about success in this course to other courses. I usually end up reading a couple of these letters on the first day of a new class.

— You are applying for your dream job. The interviewer says, “I see that you’ve taken a course in small-group communication. I’d be interested in hearing about the most important things you learned in that course.” Write your answer and then prepare an answer to this follow-up query: “How would you characterize your small-group communication skills? I’m especially interested in hearing about those skills you are still working to develop and improve.” I sell students on this option by telling them that interviewers may well ask about what they learned in college generally or in a specific course. And questions like these are hard to answer on the spot. Usually I make this a two- or three-page paper. Sometimes, with students’ permission, I copy and distribute a couple of really good answers, which we read and discuss in class. I like how this writing gets students summarizing course content.

— Reflect on your performance in this class: What have you done that bears repeating in other courses? What mistakes have you made that you would want to avoid making in future classes? The goal with this prompt is to get students thinking about the process of learning and what they are learning about learning that will help them in subsequent courses and serve them well in life.

— If someone were to ask, “What kind of student are you?”, how would you answer? If someone were to ask, “What kind of student would you like to be?”, how would you answer? If someone were to follow up by asking you to list three specific, concrete things you are doing to become the student you want to be, could you provide the list? What would be on it? This prompt helps students distinguish between what they are doing and what they should be doing. It faces them with the fact that if you want to be doing something different, you have to take action. I do interviews with students at the end of the course. In some cases I can confront them with behaviors I’ve observed in class that do not jive with what they’ve written. These discussions have value because they underscore that students are in large measure responsible for what happens to them in class.

Be welcome to use or revise these prompts. If you have ways you’ve successfully encouraged students to reflect and own their responsibility for learning, send them along to the editor. We’d be happy to publish more in subsequent issues.
Pairing vs. Small Groups: A Model for Analytical Collaboration

By Denise D. Knight, State University of New York College at Cortland

Although the use of small groups can provide a welcome change to the regular classroom routine, the results are rarely all positive. Invariably, one or two students in each group, because they are shy or lack self-confidence, are reluctant to share their input. These are often the same students who have to be coaxed to participate in large class discussions. Because of group dynamics, the student who usually emerges as the group leader, either by default or proclamation, is often not sensitive to the need to engage the quieter students in the conversation. As a result, the more outspoken students may unwittingly extinguish the very dialogue that the small group is intended to promote.

I have found that paired collaboration consistently produces better results than small group discussions do. Having students engage a question in a one-on-one exchange encourages stronger participation by both parties. Rarely do small groups generate equal contributions to the dialogue or problem solving, while pairing creates an intellectual partnership that encourages teamwork.

Paired collaboration can easily be modified to work in a number of disciplines. In my literature classroom, the following model, which I use about once every three weeks, seems to be particularly effective. At the beginning of class, I ask each student to place his or her name on a sheet of paper and to write a question about the work that we will be discussing that day. I then collect all of the questions and redistribute them so that each student has someone else’s question. Students then break into pairs and together formulate a response to one or both of the questions, depending on the time allotted for the exercise. They are required to cite textual evidence in support of their arguments. After a period of time, usually 15 or 20 minutes, each pair reports its findings to the larger group. Even if some of the pairs end up answering similar questions, they rarely have similar answers. And, if by chance each member of the pair has radically different interpretations, they are invited to share their individual responses. The exercise can actually be helpful in illustrating the variety of critical readings that one literary work can engender. And, depending on the direction that discussion takes, it can provide the foundation for discourse on a number of theoretical approaches to the text.

Experience has convinced me that the benefits of pairing are numerous. Working together provides an opportunity for problem-solving on a more intimate scale than small groups allow. Students tend to form an alliance as they work together to compare—and share—their interpretations. They are more likely to come to class prepared to engage the reading, as they know that they might be called upon at any time to share their knowledge. Finally, a paired model not only allows quiet students to find—and use—their voices, but it also teaches mutual respect and cooperation. Paired collaboration is a small adjustment to the typical group discussion that can yield big results.

GROUP QUIZZES
FROM PAGE 3

grades than students in the control group. Researchers think the lack of impact on tests and grades might have occurred because these quizzes only counted for 14 percent of students’ grades. They also thought, based on recommendations in previous research, that perhaps these students needed some instruction in group processing issues.

The second pragmatic question of interest involved whether or not this approach to group quizzes would improve students’ preparation for class. Would it more effectively motivate them to keep up with the reading? The answer to this question was yes. Students reported that they were more likely to come to class having already completed the assigned reading. Their comments illustrate what a powerful influence peers can have on each other’s learning.

Finally, researchers were interested in the effects of this kind of collaborative quizzing on several different student attitudes. Would students be more positive about quizzing in this format? Would they think taking quizzes this way would positively influence exam scores and final grades? Would they be more positive about the field of sociology? And, would their initial skepticism about this approach to testing diminish as they experienced the process? Each of these questions was answered positively by the study’s results. The researchers wonder whether these positive findings might be indicative of an even larger impact. “If collaborative testing motivates students to complete assignments and to develop positive attitudes about both their peers and the course material, it may also help to foster student retention.” (p. 260)

Of their findings overall, these researchers conclude, “These results provide further empirical support to those instructors and researchers who have championed the use of collaborative learning strategies and should suggest to others that they might be well worth considering.” (p. 261)


The Teaching Professor
February 2007
Humor: Getting a Handle on What’s Appropriate

The contribution that humor makes to learning is well established in research. It is not that humor causes learning; rather, it helps to create conditions conducive to learning. It helps learners relax, alleviates stress, and often makes it easier for students and teachers to connect personally. The presence of humor in a classroom can be very beneficial.

But there are a couple of problems. First, faculty often don’t think of themselves as funny—some are, but most academics would not make a living as stand-up comedians. In fact, any number of faculty cannot successfully tell a joke, even after carefully rehearsing the lines and easing their tension with liquid libations. So, how might a serious academic find his or her way to humor that works in the classroom?

And then there’s the problem of propriety. Not all humor is appropriate, especially given the commitment of higher education to cultural respect, diversity, and equality. If you can’t make jokes about ethnicity, politics, religion, or sex, is there anything left for one-liners?

Fortunately some recent research offers help on both fronts. For faculty who don’t think they can be funny in the classroom, there is a wide range of different kinds of humor. Options abound. Early research (referenced in the article below) identified seven different kinds of humor: funny stories, funny comments, jokes, professional humor, puns, cartoons, and riddles. And each of these kinds of humor can be employed with great creativity, such as using weird names in math word problems; referring to aspects of content with humorous names, such as calling bacteria “baby beasties”; using different voices; wearing funny clothing; or telling stories about family or college days. The best news is that all of these kinds of humor have the same positive impact on learning environments.

The purpose of the study referenced below was to identify what students consider appropriate and inappropriate humor. Researchers did that by asking 284 undergraduates to list several examples of “appropriate and suitable” humor and then asking them to do the same for humor that was “offensive and/or not fitting for the class.” The students had no trouble identifying examples in both categories.

This student sample generated 712 examples of appropriate teacher humor, which researchers placed in four different categories. The first, which contained almost half the listed examples, researchers called “related humor.” This humor linked with course materials; examples included a physics instructor who regularly played with a Slinky to demonstrate certain physics principles or another who used course material in jokes: “What do you call someone who likes to go out a lot?” Answer: “Fungi.”

The second category was unrelated humor. These first two categories contained more than 90 percent of the examples students provided, although researchers note that there was overlap between the two categories. Examples in this second category include some teasing of student groups or individual students, or some stereotypical student behavior such as procrastinating.

The remainder of the appropriate examples were self-disparaging humor in which the instructor made jokes or told stories that poked fun at or belittled him or herself. Then there was a very small category of unintentional or unplanned humor when something funny happened spontaneously in class.

Equally valuable in this research is the analysis of inappropriate humor, for which students offered 513 examples, which researchers again placed in four categories: disparaging humor targeting students, disparaging humor targeting others, offensive humor, and self-disparaging humor.

More than 40 percent of the examples fell into the first category where instructors disparaged students individually or collectively. Students were disparaged for their lack of intelligence, gender, or appearance, as well as for their opinions.

When the disparaging humor targeted others, it used stereotypes and such specific group characteristics as gender, race/ethnicity, or university affiliation. Some inappropriate humor examples were listed as offensive because they contained sexual material or vulgar verbal or nonverbal expressions, or they were too personal.

In conclusion, researchers encourage faculty to explore humor related to the course content. Students always considered it appropriate. Moreover, many reported that it helped them relate and recall important course information.


What Teachers Learn

FROM PAGE 2

gin, and aspirations. His goal is to help students build up a “fund of knowledge” about each other.

Would that academic environs were more conducive to faculty taking classes—until they are, we should pay close attention to the experiences of those who manage to once again become students in a college classroom.