



Don't Just Tell Me; Show Me: Using Graphic Organizers Effectively

By Patty Kohler, University of Central
Arkansas, pattyk@uca.edu

Teachers tend to present new knowledge to students linguistically. We talk, they take notes; we talk, they listen; we assign, they read. Students are pretty much on their own when it comes to figuring out how to represent the new knowledge in ways meaningful to them. Research clearly indicates that brain activity is enhanced when we use and teach our students to represent information in a visual way. So how do we do that? I do it by using graphic organizers. Let me explain the rationale behind them, offer some tried-and-true examples, and identify some great sources on developing and using graphic organizers.

Why use graphic organizers?

Defined as a visual representation of knowledge, graphic organizers structure information into a pattern and use labels to help make relationships among discrete pieces of information clear. The use of graphic organizers makes recall and retention of materials easier for many students. They are especially beneficial for those students who have difficulty organizing information as well as those who need a concrete representation to structure abstract ideas. When used consistently and creatively, they can greatly enhance instruction. Graphic organizers can be constructed for exploring cause and effect, main idea and details, sequences, decision making, making predictions, and almost any other type of thinking and learning we have our students do. The possibilities are endless.

Tried-and-true examples

Practically anyone who has ever been in school has seen a Venn diagram. Named for John Venn (1834-1923), Venn diagramming uses overlapping circles to represent sets of information and the relationships of the sets to one another. It has been in use for more than one hundred years, and examples of it can be found in almost every field.

The KWL chart is a great way to assess students before, during, and after instruction. By dividing a page into three columns and labeling these "What I Know," "What I Want to Know," and "What I Have Learned," the KWL chart can be a useful tool for helping students and instructors keep up with what learning is taking place. I often use the KWL when I am explaining a complex assignment. Students list what they think they know about the assignment, what they still want to know, and what they have learned after an in-depth discussion of the assignment.

Another easy-to-use graphic organizer is the timeline or time sequence. This is a way to organize events chronologically. Use of a "T" chart is yet another common way to depict information visually. Whether the two sides represent pros and cons, reasons for and against, or two sides to an issue, the "T" chart enables students to consider ideas when they are juxtaposed.

Using the Internet and other resources

There are countless sources for finding usable, generic graphic organizer templates. One website is

www.writedesigonline.com/organizers/index.html. This site lists numerous graphic organizers and a brief description along with possible uses for each. I have used this site for years and have found it very helpful.

Another excellent resource is the Strategic Instruction Model® Content Enhancement Routines. This is a collection of 14 routines for use in classrooms, and it includes organizers for planning and leading instruction; exploring text, topics, and details; increasing performance; and teaching concepts. More information on this series can be found at <http://kucl.org/sim/content.shtml>. In addition to these two resources, there are create-your-own graphic organizer resources. One I have used is Inspiration. This tool allows you to draw your own organizer. Information on this can be found at www.inspiration.com.

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**Editor**

Maryellen Weimer, Ph.D.
E-mail: grg@psu.edu

Magna Editor

Rob Kelly
robkelly@magnapubs.com

President

William Haight
whaight@magnapubs.com

Publisher

David Burns
dburns@magnapubs.com

Creative Services Manager

Mark Manghera

Art Director

Deb Lovelien

Customer Service Manager

Mark Beyer

For subscription information, contact:

Customer Service: 800-433-0499
E-mail: custserv@magnapubs.com
Website: www.magnapubs.com

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- 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.

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Rapport: Why Having It Makes a Difference

Rapport, defined as “the ability to maintain harmonious relationships based on affinity” (a definition cited in the article referenced below), is more colloquially thought of as what happens when two people “click”—they connect, interact well, and respond to each other favorably. Often it happens when two people are very much alike or have lots in common. That’s one of the reasons it isn’t always easy for professors to establish rapport with students—sometimes there’s a big age difference; others times it’s having few (if any) shared interests. However, there are good reasons for faculty to work on establishing rapport with students. The article referenced below lists outcomes, all established by research, that result when rapport is established. Here’s a selection from the larger list that does seem particularly relevant and that is supported by some research involving teachers and students.

- **Higher motivation**—When students feel rapport with their teachers and feel that their teacher’s personalities are something like their own, motivation is higher.
- **Increased comfort**—When there is rapport, students tend to answer more freely and with a greater degree of frankness.
- **Increased quality**—In a degree program, when students feel rapport with faculty, their perceptions of the quality of that program increase.
- **Satisfaction**—Rapport leads to satisfaction—supported by much research, including research done in classrooms. When students report having rapport with the instructor, their satisfaction with the course increases.
- **Enhanced communication**—As rapport grows, so does understanding and comprehension. Teachers and students understand each other better when there is rapport between them.
- **Trust**—Sometimes trust is necessary for rapport to develop. But trust can also be an outcome. Once rapport has been established, trust between parties grows.

Rapport does not result in learning, but it certainly helps to create conditions conducive to learning—things like higher motivation, increased comfort, and enhanced communication. Teaching doesn’t always result in learning either, but, like rapport, it is one of those factors that can contribute positively to learning.

The researchers in this article queried business faculty about their perceptions of rapport—what must a teacher do to establish it with students? Five factors appeared almost twice as often as others.

Respect. Teachers and students must show respect for each other, for the learning process, and for the institution where it is occurring.

Approachability. Students have to feel comfortable coming to faculty and faculty must be willing to speak with students, after class, during office hours, via email, on campus.

Open communication. Faculty must be honest. There needs to be consistency between what faculty say and what they do.

Caring. Faculty must care about students; they must see and respond to them as individuals. They also need to care about learning and show that they want students to learn the material.

Positive attitude. Faculty should have a sense of humor and be open to points of view other than their own.

Rapport is not something developed by announcement. Rapport is developed by actions—it results from things teachers do. The good news, as demonstrated by the content of this article, is that we know empirically what teachers can do to establish rapport. The even better news is that the actions required aren’t all that difficult to execute.

Reference: Granitz, N. A., Koernig, S. K., and Harich, K. R. (2009). Now it’s personal: Antecedents and outcomes of rapport between business faculty and their students. *Journal of Marketing Education*, 31 (1), 52-65. 🍀

How to Get Your Students to Read What's Assigned

By Sara Jane Coffman, Purdue University,
IN, sjcoffman@purdue.edu

How often have these scenarios happened in your classroom?

Scenario 1: You ask a question in class, but all you see are blank stares. It's a straightforward question about the reading and guess who hasn't done it?

Scenario 2: A student comes to your office complaining that he studied for the quiz, but couldn't remember anything he read!

Scenario 3: Your students turn in essays based on the reading assignment, but their papers are extremely superficial. They may have read the material, but they didn't really understand it beyond the most obvious level.

Unfortunately these scenarios happen regularly in many college classrooms. The questions are: How do we get our students to read what's assigned? And how do we get them to read at more than just a superficial level?

To begin with, we need to determine *why* students haven't read the assignment. Reasons range from not buying the book to poor time-management skills to not knowing *how* to read a college textbook. Reading is a dying art. I'd like to share nine suggestions that get students doing the reading and, more importantly, show them how and why.

1. Spend at least one class period at the beginning of the course looking at the textbook with your students. Explain *why* you chose the book and show your excitement about it. Walk them through the structure of the book, pointing out your favorite features. There may be a "To the student" section near the beginning with information on how to read the book. Key terms may be highlighted with advance organizers, structured overviews, or colored boxes

in the margins. There may be mini-quizzes throughout the chapters so students can test their understanding. Explain how all these features can help students read and learn the material.

Are there interesting tidbits about the author you could share? Better yet, could you arrange a conference call with the author and have him or her talk about the book? Hearing the author being excited about the book has a great effect on students.

2. Encourage use of supplemental materials connected with the textbook. There may be a study guide, online links, or an audio version of the book. Students have different learning styles, and their varying needs can be met by different information formats.

3. Explain the importance of new terminology. Vocabulary is used precisely in academic fields, and new terms are the building blocks for new concepts. Show your students how to make flash cards with the new term on the front, and the definition *in their own words* on the back. Rote memorization is one of the *least* effective ways to learn new material; translating the textbook terms into one's own words is one of the best.

4. Teach your students to identify key ideas by writing notes in the margins, using sticky notes, and rewriting important concepts into a notebook. These activities make reading *active* rather than *passive*.

5. Prepare three to five questions for each reading assignment and have your students write answers before coming to class. Get students on board with this activity early in the course. Grading their worksheets can be time consuming—you'll need to develop some efficient approaches, but your students will benefit greatly by having something to turn in. *You'll* benefit by having students

able to intelligently discuss the material.

6. During class, have students turn to specific pages and read through the graphic material or a key section. Using the book in class helps to establish its importance. You might start out by explaining the material, but at some point start asking *students* to provide the explanations.

7. Teach students to ask questions about the reading material. Use the five "w's" (and one h)—who, what, when, where, why, and how. Curiosity and learning should be linked. Sometimes we need to show our students *how* to be curious.

8. Before each exam, explain what percentage of the questions will come from the text and offer some sample questions. Explore with students the different kinds of questions: literal questions (which require simple memorization), inference questions (which require deeper thinking), and application questions (which require them to explain a concept they've learned in a new context).

9. Invite the students who don't do well on your first exam to your office for individual appointments, and spend some time working with them on their reading skills. Have them read aloud and ask them to process the information back to you. Effective learning includes being able to verbalize written material. Your listening ear and encouragement may well be the event that opens new doors for them.

We don't have to just imagine a classroom where students come prepared. We can take actions that make it more likely to happen! 🍀

Exploring ‘Bottlenecks’ to Learning

“It is a story replicated in many history classrooms during the semester. Students have once again done poorly on an assignment or exam. Their essays are the sites of massive, undifferentiated data dumps. They have paraphrased primary sources instead of analyzing them, ignored argumentation, confused past and present, and failed completely to grasp the ‘otherness’ of a different era.” (p. 1211)

Although this particular story may be unique to history, a story very much like it unfolds in the classrooms of many disciplines. What’s the problem? “These sorts of poor performance often result from a mismatch between what college history teachers expect of their students and what those students imagine their task to be.” (p. 1121) Mismatches between teacher and student expectations are also not unique to history. They occur because faculty were highly successful students in these disciplines. They learned to be “historians” easily, with a certain naturalness—what historians (also physicists, anthropologists, engineers, the list could be very long) do, they did almost automatically. “As a result, professors often do not model for their students some of the basic—and most essential—steps in historical analysis.” (p. 1121)

The authors (three historians and one educational developer) of these insightful comments decided that the mismatches between teachers and students might be worth exploring. They might learn important things about their students but, more important, they might identify instructional strategies and approaches effective at breaking through these bottlenecks. They started with the bottlenecks and a goal of understanding them as explicitly and concretely as possible. They conducted 17 90-minute, video-taped interviews with history faculty. They asked faculty to identify and talk about the bottlenecks—those places in their courses where students had trouble grasping basic concepts or successfully

completing assigned work. Then they ask each faculty member what needed to happen for students to get through these obstacles to learning.

The article describes bottlenecks that faculty named and offers concrete examples for addressing each. Some of what faculty listed included not correctly understanding the nature of history as a discipline, including historical analysis; not being able to draw evidence from primary, secondary, and textbooks sources; and not recognizing or being able to produce arguments.

Despite the value of what they learned from these interviews, these faculty researchers needed to know if the perceptions of faculty could be confirmed by evidence collected from students. They surveyed 842 students enrolled in a variety of different history courses and in classes at different levels and of different sizes. They asked students what they thought professional historians did, they asked them to identify the best way to prepare for history exams, and, finally, they tested their ability to read and answer history exam questions. “What we found confirmed the experiences of the professors and brought new perspectives from which to understand our classroom audience.” (p. 1217) For example, only 38 percent of the students surveyed thought the basic task of professional historians was to develop interpretations (what researchers considered the right answer). Thirty percent thought historians evaluated the ideas and decisions of earlier eras. Encouragingly, the more history courses taken, the more likely it was that students answered this question correctly. As for the best ways to study for a history exam? Forty-eight percent selected memorizing (an answer the researchers considered wrong).

“The faculty interviews and student surveys would have been of little importance had they not led to attempts to increase the learning of history in our classrooms.” (p. 1219) A group of faculty

and graduate students “set out to teach explicitly the historical skills defined in the interviews and to assess what difference this instruction made in student understanding. They focused on skills ranging from note taking and historical argumentation to the ability to deal productively with emotionally charged subjects.” (p. 1219) Specific approaches and assignment details are included in the article.

The researchers do understand that curriculum changes in one or two courses will not be enough to break through these bottlenecks. “Any serious attempt to model historical thinking needs to be integrated into a systematic curriculum.” (p. 1221) And the authors are not naïve about what this entails. “The creation of such a broad skills-based vision of a department’s offerings requires a shared space and a common language. The creation of such a shared ‘teaching commons’ is particularly difficult in humanities disciplines ... where there is little tradition for collaborative scholarship.” (p. 1221)

The project has made clear the value of this kind of scholarly work. A bottleneck could be considered a misfortune. When students aren’t learning course content, it’s easy to blame the students and bemoan the caliber of their preparation. However, a scholarly inquiry like this reframes the problem “not as a misfortune to be endured, but rather as an opportunity to gain knowledge about our students and how we can teach them.” (p. 1223) New strategies for teaching evolve quite naturally out of that knowledge.

Reference: Diaz, A., Middendorf, J., Pace, D., and Shopkow, L. (2008). The history learning project: A department “decodes” its students. *The Journal of American History*, 94 (4), 1221-1224. 🍀

McGraw-Hill and Magna Publications Award for Scholarship on Teaching and Learning

We are pleased to announce the winner of the McGraw-Hill and Magna Publications Award for Scholarship on Teaching and Learning. This award was first announced in May 2008 at *The Teaching Professor* Conference in Orlando. A call for nominated and submitted articles, published between 2006 and the present, appeared on *The Teaching Professor* website. By the end of October, 224 articles had been submitted. The winner and finalists were selected by a panel that included authors of pedagogical periodicals, noted writers in higher education, and faculty developers familiar with the pedagogical literature. The \$1,000 award was presented at the 2009 *Teaching Professor* Conference.

Here's the winning article:

Diaz, A., Middendorf, J., Pace, D., and Shopkow, L. (2008). The history learning project: A department decodes its students. *Journal of American History*, 94 (4), 1211-1224.

Highlights from the winning article appear in this issue of the newsletter. The review panel praised the design of this study, thinking it exemplified how practical and relevant scholarly projects on teaching and learning can be. They also

noted that the piece is extremely well written. Even though it is a project completed within a history department, what the authors explored, what they found, and what they've been doing about their findings are relevant to faculty in many departments.

The review panel also identified four other finalist articles, all of which are of interest to TP readers. Two of the four articles have already been highlighted in the newsletter—before they were submitted for this competition. We will summarize content from the other two subsequently.

Finalists, listed in alphabetical order:

Hayes-Bohanan, P. and Spievak, E. (2008). You can lead students to sources, but can you make them think? *Journal of College and Undergraduate Libraries*, 15 (1-2), 173-210.

Hawk, T. F. and Lyons, P. R. (2008). Please don't give up on me: When faculty fail to care. *Journal of Management Education*, 32 (3), 316-338.

[highlighted in the December 2008 issue of *The Teaching Professor*]

Lerner, N., Craig, J., and Poe, M. (2008). Innovation across the curriculum: Three case studies in teaching science and

engineering communication. *IEEE Transactions on Professional Communication*, 51 (3), 280-301.

Prince, M. J., Felder, R. M., and Brent, R. (2007). Does faculty research improve undergraduate teaching? An analysis of existing and potential synergies., 96 (4), 283-294.

[highlighted in the March 2008 issue of *The Teaching Professor*]

Check *The Teaching Professor* website (www.teachingprofessor.com) during the summer for an announcement about the second award. The rules and selection criteria will be posted on the site as well. We invite you to nominate a piece of your own scholarship and/or nominate impressive pieces of pedagogical scholarship completed by others. We will be reviewing articles published between 2007 and the present.

Outstanding scholarly work on teaching and learning merits recognition. We believe this is the only cross-disciplinary award of its kind. Honor our efforts by reading these articles and sharing them with others. Help us establish the credibility of this award and the work it recognizes by nominating your best work and that of others. 🍎

Learning Can Be Frightening

A friend stopped by the house yesterday and announced, "We learned yesterday that my wife has cancer and it's serious." The anguish he was feeling was audible in his voice and visible on his face.

I was struck by his word choice, "We learned ..." Clearly this is not something anyone would want to learn. Although not learning, in this case, would most certainly mean death. It's been a while since I've thought about learning being frightening, but sometimes it definitely is.

It's frightening when you learn that something you've been taught and believed

for years isn't true. That happened a lot to me in college. What I'd learned about creation just couldn't stand up against what looked to me like a mountain of evidence. Even more frightening was a growing realization that what I had been taught about what women should do and could become just didn't make sense. More than once I remember learning things and just resolving not to think about them.

A lot of learning for first-generation students is frightening. Knowledge about a host of things makes it difficult to connect with the people and places that were once

home. I remember a poignant essay in which a student wrote about trying to explain to his father that what you called something didn't change what it was. The example was making love and mating. The father maintained that squirrels mated and humans made love. The son tried in vain to get the father to see that copulation was mostly about biology. We could make it mean something different depending on what we called it, but squirrels and humans were really doing the same thing. The

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Experience: Learning From It

In an editorial published in the *Journal of Geoscience Education*, a geography faculty member offers a testimonial in favor of learner-centered teaching. “Through my 15 years of teaching Earth System Science, I have explored various ways of teaching it and have become convinced that the Learner-Centered Environment, that builds upon constructivist theory principles and fosters teaching practices that recognize the active roles students must play in their learning, is particularly suitable for Earth system science education.” (p. 208)

The editorial proceeds with descriptions of her approaches to both teaching and assessment. She concludes, “In summary, based on my personal experience, I am convinced that Earth system science instructors need to move away from designing courses driven mostly by content, delivered through lectures and punctuated by objective tests towards courses centered on specific learning outcomes, based on the principles of learning, and guided by what students bring to the classroom [sic].” (p. 209)

Convincing testimony, if you also believe in learner-centered approaches; probably unconvincing if you don't. Either way, statements based on personal experience raise interesting questions. What can teachers learn from experience? Most of us, after looking at our own teaching,

would say a lot. The classroom is a school-room for the teacher unlike any other. It is such a public learning place. If you try a bit of humor and nobody even recognizes the attempt, that's difficult to miss and not easy to forget after class. Unfortunately, though, not everything learned from experience is accurate. Sometimes a small misunderstanding can lead to other wrong conclusions and pretty soon what the teacher thinks has been learned from experience is totally unjustified.

So how does a teacher parse the experiential lessons? Believing strongly doesn't guarantee the integrity of the lesson learned. This geography professor believes in what she has learned. But she didn't start out already having had a conversion experience. Her change of heart started with an activity, a kind of Earth Summit in which students presented on an environmental topic relevant to a particular country. “I noticed how ALL my students became much more engaged in the class, performing extensive research on topics of relevance to their selected country, and displaying originality in their research approach and presentations.” (p. 208) That success led to more “participatory” approaches and finally to conclusions about the common elements shared by all these approaches.

She is also honest about what the

approach involves. “The learner-centered way of teaching is demanding and time consuming. It requires more planning than a conventional way of delivering material and the design and delivery need particular attention.” (p. 209) Would you opt for something harder and more work if you didn't have pretty good evidence that justified the extra effort?

I'd say that chances are good that what she's learned from experience has some validity. But there's another part to the question of what can be learned from experience. What can teachers learn from each other's experiences? Personal experience has fallen out of favor in most pedagogical periodicals. For a long time faculty reported on instructional innovations with the passion of the newly converted. “This is the greatest thing that has happened to my teaching in decades.” “It worked so well and my students liked it so much.” That's not scholarship, not reflective, not analytical, and hence not very credible.

But I still think there should be a place in the pedagogical literature for thoughtful accounts of experiences that articulate what a teacher has learned. Those accounts can be tested against our own experiences and those of others. They can be benchmarked against educational theory and

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father was adamant: humans made love and squirrels did not. The father had a point but the son wrote eloquently about his father's inability to understand how language worked and how what you called something changed your perception of that thing but did not change the thing itself. The essay was full of anger, disappointment, confusion, and fear. What he was learning was changing his relationship with his father.

Sometimes learning something about

another person is frightening, often because the learning is so firsthand. The person lied to us, let us down, pretended that our relationship was something that it wasn't, used us, or just up and left. What the other person did caused pain, but shortly past the pain was fear. How did we miss what was coming? How many other people are pretending to be something they are not? This kind of learning makes us wise and insightful about others, if not on occasion cynical and suspicious.

Being so involved in the learning business, I wonder if we don't at times get a bit cavalier about everything that learning

involves, a bit less mindful of how much respect the process merits. Learning is always (almost always?) better than not knowing. Even learning that is painful and frightening opens new doors of understanding. Upon leaving, our friend remarked, “I learned something else yesterday. I learned how much I love my wife and how not ready I am to have her go.” Tears filled his eyes, but he had learned something about himself definitely worth knowing. ♥

When Peers Teach, Students Learn

Evidence that students can learn from each other continues to grow. The quality of some of the research documenting that fact is impressive. Here are highlights from a new study in which peers were used to facilitate discussion groups in a large general chemistry course.

The program at Washington University in St. Louis is based on a peer-led team learning (PLTL) model now used at a number of colleges and universities. At Washington University students self-select to this option of the course. Once selected, attendance at the sessions is mandatory. Students become members of eight-person study groups. A peer leader who has taken the two semester sequence of general chemistry previously and received at least a B+ (most received an A or an A-) meets with the study group for two hours either Saturday or Sunday to work through a series of posted problems. This program replaced tutoring services previously offered by the university.

This model is noteworthy for the training it requires of the peer leaders. They are chosen through an application process and are then required to take a two-credit general studies course, "Practical Applications of Academic Mentoring." Students may take the course without receiving credit for it. They meet weekly for two hours to work on the problems the students will do during the study group session scheduled that week. They role-play difficult situations, write reflections on the group they are leading, and work on materials development, among other tasks. In addition, they must take a one-credit "Seminar in Academic Mentoring." During this one-hour weekly course they explore various teaching topics such as group dynamics, participation, and listening skills. The peer leaders do receive payment for facilitating their student group.

In their attempts to assess the impact of the PLTL experiences, these faculty researchers controlled for a number of different background variables and used

regression analysis. They found that the PLTL students outperformed students not having the study group experience on three out of four measures of academic performance. The PLTL students withdrew from the course less often, had higher grades on the final, and received lower than a B- in the course less often than students not participating in the PLTL program. All these differences were at statistically significant levels. The PLTL students outperformed the other students by an average of one-third of a grade point. The researchers note, "This improvement in performance is seen even though our data show that the PLTL students are less quantitatively prepared than the non-PLTL students." (pp. 995-996)

In addition to these statistical differences, the faculty researchers also surveyed students about their experiences in the PLTL groups. They asked a series of questions about the effect of the group on study skills and performance. The average response to these questions was 4.21 on a 5.0 scale, with students in strong agreement that the experiences positively affected their study skills and performance. Concerning the interaction with their groups, the 4.05 mean on the 5.0 scale indicates a strong favorable response to group dynamics questions. Students also responded favorably to questions about their chemistry-related abilities, including problem solving and the overall usefulness of the study group.

Based on the success of this program, various forms of PLTL activities have been integrated into general physics, the beginning calculus sequence, and organic chemistry courses at Washington University.

Over the past several years, we've highlighted two other impressive studies of peer-led instruction in chemistry. Together these three studies offer strong justification of the fact with which we opened. Students can learn from other students and students can teach content (even difficult content) to other students. This is not an argument for dispensing

with teachers. Peer teachers in each of these studies were carefully trained and supervised, but using peers does offer a way to personalize instruction in these very large introductory courses and a way shown to help students master the material. The study highlighted here is the one listed first—it references websites that offer additional information on this model of instruction.

References: Hockings, S. C., DeAngelis, K. J., and Frey, R. F. (2008). Peer-led team learning in general chemistry: Implementation and evaluation. *Journal of Chemical Education*, 85 (7), 990-996.

McCreary, C. L., Golde, M. F., and Koeske, R. (2006). Peer instruction in general chemistry laboratory: Assessment of student learning. *Journal of Chemical Education*, 83 (5), 804-810.

Lewis, S. E. and Lewis, J. E. (2005). Departing from lectures: An evaluation of a peer-led guided inquiry alternative. *Journal of Chemical Education*, 82 (1), 135-139. ♥

SHOW ME
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Final thoughts

In college courses already packed with information and taught by instructors who are likely to add still more, it is so important that we present information in ways that help students organize and understand it. Graphic organizers enable students to see relationships among the many bits and pieces of content. Whether we use online tools or draw our own on the blackboard, these tools can clarify our instruction and promote learning for our students. ♥

Despite Shortcomings Popularity of RateMyProfessors.com Grows

RateMyProfessors.com is a free website where students can evaluate and post comments about courses needs no introduction to most instructors. The problems with the site are equally well known. There's no guarantee that the students who select to evaluate and post the comments are a representative sample—and no guarantee that the assessments themselves are representative. In fact, in the Kindred and Mohammed (reference below) analysis of evaluation for 626 professors, 41.5 percent had only one rating listed. The site does not prevent students from evaluating a given instructor more than once. It does not ensure that they have even taken the course they are evaluating. And there's nothing that prevents an instructor from entering high scores and making nice comments.

Despite these problems, use of the site continues to grow. Brown, Baillie, and Fraser (reference below) report that in January 2009 the site boasted more than 6.8 million ratings for more than a million instructors from over 6,000 colleges and universities in the United States, Canada, England, Scotland, and Wales. The numbers show just how interested students are in finding out as much as they can about a course before taking it—that was also one of the findings from the focus group interviews conducted by Kindred and Mohammed. Eighty-three percent of the students surveyed by Brown, Baillie, and Fraser reported that they had visited the site. They go there because most institutions do not give students access to end-of-course rating data.

Thirty-six percent of the students in Brown, Baillie, and Fraser's sample said they had posted on the site. Students in Kindred and Mohammed's focus groups said that students posted because they wanted to share information about the course with other students. They also indicated that students are especially motivated to offer assessments when a teacher is really good or really bad.

Kindred and Mohammed did a content analysis of 788 comments—just about 75

percent of students who rated professors made comments. "Approximately 42% of the ratings coded in the present sample (437 ratings) contained statements pertaining to the competence of the instructor." About 30 percent of those comments were negative, with the remaining 70 percent positive. The researchers conclude, "While issues such as personality and appearance did enter into the postings, these were secondary motivators compared to more salient issues such as competence, knowledge, clarity and helpfulness."

What do students think about the ratings and comments that appear on the site? In Brown, Baillie, and Fraser's survey, 71 percent of the students said they avoided taking an instructor based on the ratings that appeared on the site. Interestingly, 58 percent of that sample said they thought students were more honest in the evaluations posted on the site than on the evaluations collected by the institution at the end of the course. However, in the focus group interviews conducted by Kindred and Mohammed, students said they trusted the opinions of their friends more than what they read on the RateMyProfessors site. They also reported that they took evaluations on the site less seriously if a lot of the comments contradicted each other. They said they could tell when a comment was just angry venting and took those comments with a grain of salt.

Any number of studies have now compared the "official" student ratings collected by the institutions and those that appear on the site. Brown, Baillie and Fraser did this as well. They found, as others have, "moderate to strong correlations" between the scores for individual instructors at their institution on items appearing both on the institution's rating form and on the website.

The RateMyProfessors site does not appear as though it is going away any time soon. That does not mean its many deficiencies should be ignored. But its astounding popularity attests to how hun-

gry students are for information about courses. Are there ways instructors could share this information about their courses? Doing so helps to ensure that students get accurate information about the course and its instructor.

References: Kindred, J. and Mohammed, S. N. (2005). "He will crush you like an academic ninja!": Exploring teaching ratings on ratemyprofessors.com. *Journal of Computer-Mediated Communication*, 10 (3), article 9. <http://jcmc.indiana.edu/vol10/issue3/kindred.html>.

Brown, M. J., Baillie, M., and Fraser, S. (2009). Rating ratemyprofessors.com: A comparison of online and official student evaluations of teaching. *College Teaching*, 57 (2), 89-92. ♥

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research. Accounts in which fellow teachers reflect thoughtfully and critically about a set of classroom experiences resonate with faculty. They can make teachers think and question, and sometimes even motivate teachers to take action.

How Gautier now understands her role as a teacher may cause that kind of thoughtful response in you. "My TA and I act as coaches who facilitate learning, constantly nudging students to extend their intellectual quest a little more, while providing enough support (scaffolding) to do it. My teaching is to ensure that students understand and extend themselves. It is no longer limited to covering a specified content." (p. 209)

Reference: Gautier, C. (2006). A personal experience of designing earth system science instruction based on learner-centered environment paradigm. *Journal of Geoscience Education*, 54 (3), 208-209. ♥