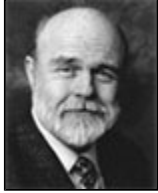


Case Method Teaching

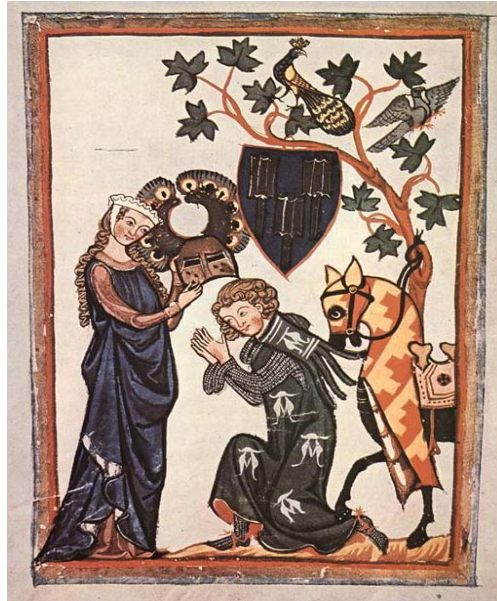
National Center for Case Study Teaching
in Science

University at Buffalo, State University of
New York



Articles by Clyde
Freeman Herreid

- [Case Studies in Science: A Novel Method of Science Education](#)
- [What is a Case? Bringing to Science Education the Established Teaching Tool of Law and Medicine](#)
- [What Makes a Good Case? Some Basic Rules of Good Storytelling Help Teachers Generate Student Excitement in the Classroom](#)
- [Sorting Potatoes for Miss Bonner: Bringing Order to Case Study Methodology Through a Classification Scheme](#)
- [The Maiden and the Witch: The Crippling Undergraduate Experience](#)



What Makes a Good Case?

*Some Basic Rules of Good
Storytelling Help Teachers
Generate Student
Excitement in the
Classroom*

Clyde Freeman Herreid

*Modern storytellers are the
descendants of an immense and
ancient community of holy
people, troubadours, bards,
griots, cantadoras, cantors,
traveling poets, bums, hags and
crazy people.*

--Clarissa Pinkola Estes

I wish she had mentioned teachers. Teachers should be in that lineup. Stories are their natural allies in the transmittal of the wisdom of the tribe from one generation to the next. Although I am not taken by Dr. Estes' notion of the Jungian archetype she so eloquently argues for in her book, *Women Who Run With Wolves*, I do agree there is something in stories that touches our fundamental nature. Estes again:

Stories are medicine. I have been taken with stories since I heard my first. They have such power; they do not require that we do, be, act anything---we only need listen. The remedies for repair or reclamation of any lost psychic drive are contained in stories. Stories engender the excitement, sadness, questions, longings, and understandings that spontaneously bring the

archetype...to the surface.

Stories are embedded with instructions which guide us about the complexities of life.

- [Saint Anthony and the Chicken Poop: An Essay on the Power of Storytelling in the Teaching of Science](#)
- [Cooking With Betty Crocker: A Recipe for Case Writing](#)
- [The Way of Flesch: The Art of Writing Readable Cases](#)
- [And All That Jazz: An Essay Extolling the Virtues of Writing Case Teaching Notes](#)
- [Return to Mars: How Not to Teach a Case Study](#)
- [Don't! What Not to Do When Teaching Cases](#)
- [Structured Controversy: A Case Study Strategy](#)
- [Jigsaw: A Case Study Technique Where Students Become Experts](#)
- [The Bee and the Groundhog: Lessons in Cooperative Learning](#)
- [I Never Knew Joe Paterno: An Essay on Teamwork and Love](#)

But not all stories are created equal. Some are better than others. And that brings us to the issue of this column, What makes a good case? Rather than begging the question or ignoring it altogether, I propose that we look at research that has been done in one of the citadels of case study instruction, Harvard University. John Bennett and Balaji Chakravarthy wrote an article for the 1978 *Harvard Business School Bulletin* presenting the results of detailed interviews and questionnaires of faculty and students. Later, Dorothy Robyn of the Kennedy School of Government wrote a note on "What makes a good case" (N15-86-673). I have mixed and matched their conclusions and amended them for our purposes:

A good case tells a story. It must have an interesting plot that relates to the experiences of the audience. It must have a beginning, a middle, and an end. The end may not exist yet; it will be what the students need to supply once the case is discussed.

A good case focuses on an interest-arousing issue. Malcolm McNair has written, "For the case to be a real living thing and for the student to forget that it's artificial, there must be drama, there must be suspense.....a case must have an issue."

A good case is set in the past five years. To appear real the story must have the trappings of a current problem. This is not to denigrate classical or historical cases, but unless a case deals with current issues and the student feels the problem is important, some of its power is lost. If a student has just seen the problem mentioned in the media, so much the better. Thus, a case on human cloning will awaken the students' interest before one on the Copernican revolution. Even a case on cold fusion is old news today and lacks the luster it did in the chaotic days of the original report.

A good case creates empathy with the central characters. We should create empathy not only to make the story line more engaging but because the personal attributes of the characters will influence the way a decision might be made. Certain decisions are beyond the scope of the characters' personalities and powers. It may be unrealistic for us to expect President Clinton to declare human cloning illegal all over the world by fiat, or for him not to comment about the NASA "Life on Mars" episode.

- [When Justice Peeks: Evaluating Students in Case Study Teaching](#)

A good case includes quotations. There is no better way to understand a situation and to gain empathy for the characters than to hear them speak in their own voices. Quotations add life and drama to any case. Quotations from documents and letters should be used as well. Quotations provide realism.

A good case is relevant to the reader. Cases should be chosen that involve situations that the students know or are likely to face. This improves the empathy factor and makes the case clearly something worth studying. Thus, for a graduate student in science, a case involving people arguing about authorship of a paper is of greater interest than sand flies in Uganda.

A good case must have pedagogic utility. Only an educator would use this jargon, but the point is valid. What function will the case serve? What does it do for the course and the student? What is the point of the story in the education of the student and is there a better way to do it?

A good case is conflict provoking. Robyn argues, "Most cases are fundamentally about something controversial," if not, what is there to talk about? She goes on, "Is this an issue about which reasonable people could disagree?" If so, you have the beginning of a good case.

A good case is decision forcing. Not all cases have to be dilemmas that need to be solved, but there is an urgency and a seriousness that is involved with such cases. We can easily second guess the owners of the shipping lines about the Valdez oil spill in retrospect, but at the time many of their decisions may have seemed quite reasonable. In dilemma or decision cases, students can not duck the issue, they must face problems head on. Without a dilemma in the case, a student can sit back and tsk tsk the way that a case unfolded. When they are forced to take a position, they are thrust into the action of the case.

A good case has generality. What good is a case that is so specific that one can use it only as a curiosity? Cases must be of more use than a minor or local problem; they must have general applicability. If one writes a case about the cold fusion affair, there must be more to it than to state that Pons and Fleischmann made a mistake or that particular chemical reactions are not going to solve the world's energy problems.

A good case is short. It is simply a matter of attention. It is easier to hold someone's attention for brief moments than long ones. Cases must be long enough to introduce the facts of the case but not so long as to bore the reader or to make the analysis tedious. If one must introduce complexity, let it be done in stages. First, give some data and then a series of questions and perhaps a decision point before more information

is introduced. After all, that is the way life plays out...little bits at a time.

So now we have the recipe, can we bake the cake? Can we take a subject that tickles our fancy and write a case that will work? Let us try an exercise for starters. Let us see how some of these ideas work out in practice. I have written two versions of an incident to emphasize the key points. Since readers of this column come from different disciplines, we will take a problem familiar to all teachers: cheating.

A CASE OF CHEATING?

Version I

A teacher was instructing 24 students in an introductory physics course during the summer. She was using a version of cooperative learning where students worked in small groups throughout the term. She gave daily quizzes, first individually and then in groups. The professor had a habit of leaving the classroom during the quizzes. All went well until the last day of class when she heard from one of her best students that cheating had occurred during the quizzes. When she gave out peer evaluation forms for the students to rank their teammates, she gained additional information. Two Asian students in adjoining groups had been cheating. Six separate students wrote about how the two friends had cheated and that they had been told to stop by their teammates but to no avail. There were no more class periods left, only the final exam. What should the teacher do?

Version II

"I couldn't stand it! I had to move. They were cheating. I study hard to get my 'A,' and they were cheating."

Physics professor Margaret Blake looked hard at the young women in front of her quietly telling her story. Paula was one of her best students. Margaret had asked her why she had suddenly moved during the daily quiz.

"Lang, the guy in the group next to us, writes his multiple choice answers in large letters on his quiz paper. He holds it up for Mengfei who is in our group to see while you are out of the room. We all told them to stop, but they keep doing it."

Margaret replied, "I wish you had told me sooner, we could have done something. Today is the last regular day of class. Friday we have the final exam. There isn't much we can do now. Well, at least today we are having the peer evaluation

where you rank the contributions of the rest of the members of your group. Be sure you write down your complaint."

"I guarantee that lots of us will complain."

Not long after the class was over, Paula's words came true. Six students had pointedly written about the cheating between the two Asian students. One student in Mengfei's group was especially angry: "Meng gets such a low mark because he is never prepared. He comes to lab whenever he feels like it, and he and his buddy cheat every single day. Did you see how badly Meng did on the quiz when you stood behind him? And he always changes his answers on his bubble sheet and pretends they were scored wrong. I HATE CHEATERS! AARRGH!"

Margaret sat there in her office stunned. She always thought that group learning prevented this sort of thing, otherwise she never would have left the room during the quizzes. Now what? Paula's last words rang in her ears, "They were cheating. What are you going to do about it?"

Most people, I believe, would find the second case more compelling than the first. Why? Both versions tell essentially the same story. Both deal with an interesting issue and are recent, relevant, pedagogically useful, conflict provoking, decision forcing, have generality, and are brief. But while the first version is a rather cold rendition of the facts, the second gives us a feel for the characters through their speech and thoughts. We can identify and empathize with them. They seem real, and because of this we care about the decision. If we had spent a little more time we could have even shared Margaret's anguish as she wondered about her own culpability in the situation. Had she expected too much from the students? Was this a cultural problem? Were these Asian students really aware of the rules in her classroom? What were her responsibilities to the rest of the students?

So what is the essence of a good case? It is this: A good case has ambiguities and it requires space to give a richness of texture to a story. The audience never knows how it will all come out, and that is at least half of the magic. And this half of the magic matters greatly in the classroom where the case will be "solved." No two discussions will ever be the same in a great case. There should be new flecks of gold to be panned each time the stream is visited.

If uncertainty, richness, and options are one half of the magic of a good case, what is the other half? I would argue it is the realism that is captured in the story line. The best cases conjure

up the sounds, smells, and sights besetting the protagonists. It is not essential that the story line be so compelling that the reader can literally feel the deck of the Titanic as it slips beneath the waves or hear the cries of the winged monkeys as they carry Dorothy off to the castle of the Wicked Witch. But it must be real enough to make the reader believe the problem is worth solving and care what the solution should be. Given that, the battle is won. And if the story teller is good enough that the reader can indeed close his eyes and believe the knight is there on a white charger, lance in hand, and feel the hot breath of the dragon, so much the better. It is something to strive for in case writing. Such magic is hard to find.

This article originally appeared in the Dec.1997/Jan. 1998 issue of the Journal of College Science Teaching (pp.163-165). It is reprinted here with permission from NSTA Publications, Journal of College Science Teaching, 1840 Wilson Boulevard, Arlington, VA 22201.

[Return to Case Method Teaching](#)

[Home](#) | [Summer Workshops](#) | [Case Method Teaching](#) | [The UB Case Study Collection](#)
[Fall Conference](#) | [Case Ideas](#) | [Other Case Study Web Sites](#) | [Related Sites](#) | [Professional Societies](#)