



## **Best Practices for Teaching and Presenting Safety Topics**

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### **Introduction**

McKeachie observes, "Skill in teaching is not something to be learned and simply repeated; what makes it exciting is there is always room to grow" (McKeachie xvii). Foundational to adding techniques and best practices to your delivery is that you continue your own discovery, learning, and scholarship. Best practices are essentially useless if one hasn't mastered the materials and doesn't have profound knowledge of the content. W. E. Deming once noted a pre-requisite of a good teacher is they must first know their subject matter. Best practices and techniques are no substitute for this basic underlying knowledge.

In addition to competence and subject mastery, teachers and presenters are exponentially more effective with students and audiences when they demonstrate caring behaviors and trustworthiness. Good relationships and a solid reputation of being trustworthy are foundational to any techniques or best practices. When teachers have the mentality of serving and helping others learn, and put these above or equal to their self-interests, students understand and respond accordingly. The best teachers have the mentality of good leaders, coaches, and mentors.

Whether we are teachers, trainers, or consultants (or all three), our goals are typically to provide the best education and presentations we can. Our students and clients anticipate our help as they seek an edge in knowledge and a resulting improvement in safety performance. Recognition and application of the following practices may enhance the effectiveness of your delivery and improve the quality and quantity of student learning.

### **Can Asking Questions Instead of Simply Making Statements Improve Teaching Effectiveness?**

Many outstanding presenters are skilled in the technique of asking questions. They ask questions such as "What if...?" and open ended questions beginning with "How...?" or "Why...?" To check for understanding, instructors may ask "Does this make sense?" One of the benefits of asking relevant questions is gaining the attention of students or audience. Good questions help to open our minds and get us thinking more deeply about the topic. The artful use of questions can raise curiosity and get people wondering about the answers. This is a superior approach to simply being "fed" the answers.

Another potential benefit of using a questioning technique is that it may indicate the instructor has an open mind and is willing to be influenced and listen to others ideas. This suggests the instructor



cares about the audience and how well they are learning. This demonstrates a more caring approach and focuses on what students and audience are thinking and need to know, and not solely on the presenter's performance.

In *Good to Great*, Jim Collins asks, "How do you create a climate where the truth is heard?" Collins book is about organizations becoming great, but he provides four basic practices, two of which may be especially relevant for teachers:

1. Lead with questions, not answers
2. Engage in dialogue and debate, not coercion (Collins 74 – 76).

Good instructors ask pertinent questions to help students hear and apply new knowledge.

During discussions, a teacher might ask the following kinds of questions:

- For Clarity: "Could you give me an example of what you mean?" or "Does this make sense?"
- For Precision: "Can you be more specific?" or "Can you give us more details?"
- For Relevance: "How does this relate to the problem we're studying?"
- For Depth: "What are some of the complexities of this question?" or "What are some of the difficulties we need to deal with?"
- For Breadth: "What are some other perspectives or points of view?" or "Should we look at this in some other ways?"
- For Significance: "What do you think is the key point about this topic?" or "Which of these factors are most important?" (adapted from Paul & Elder)

**Best Practice:** Liberally apply the skillful use of questions to enhance learning.

## Why Should Instructors Establish Clear Objectives and Expectations at the Beginning of a Course?

Clarity about one's objectives enables the instructor to stay on target. Course objectives should delineate precisely what students will be able to do as a result of taking the course. Your expectations should be very clear and help students and participants anticipate what you expect to accomplish, and how you plan to do it (the agenda). It's important for students to understand the goals of the course or presentation. The instructor can make a concerted effort to ensure the objectives are fulfilled. During the course or presentation, refer to your objectives often, explain the benefits of meeting the objectives, and ensure you are doing what it takes to achieve them.

**Best Practice:** Establish clear, meaningful objectives and use them for direction, motivation, and achievement.

## How Does Explicitly Framing Your Material Help Students?

Place your topic(s) into the proper context for students. Consistently relate your subject matter to the overall course objectives. You may also want to relate your current subject to your recent classes or discussions. Explain how the topic is relevant in the world today. For example, you may be very clear in your own mind about how specific topics fit into the overall materials and objectives, but students may not be clear unless you specifically spell it out. Vagueness can be a problem for some teachers who have a high level of expertise, and may have years of work experience in a topic they are now teaching.



Sometimes experts may fail to clearly explain the background to what they're teaching and to adequately put their material into relevant context, making it more difficult for many students to follow.

Krisco claims although it is difficult to do, it is possible to manage and shape the way other people listen to us. He calls this technique "couching" and says we do it all the time, perhaps without even making a distinction about what we're doing. When we couch our material, we "create a more positive context by offering preliminary comments" (Krisco 82). Obviously, our ability to manage and shape our students and audience listening is limited, but we do have the ability to influence listening to a degree. Intentionally couching one's material is a good tool for teachers to enhance student understanding.

Establishing the specific framework for your content helps students recognize the importance of the topic, and how it fits into the big picture. What is the background? What is the history leading up to this point? Where do we intend to go with this idea or concept? Perhaps most importantly, how is this topic useful to the students? How may they use the material they are learning now in their future careers? Providing a framework that includes past, present, and future can be motivational for students as well as educational.

A brief story illustrates this point about how current learning may have an immense impact on future careers and decisions. When telling new safety students about ASSE, I emphasize the importance of getting involved as a member and perhaps as a student officer. It is also highly meaningful to students to emphasize, with stories, the potential benefits of networking and meeting ASSE professionals working in the safety field. A few years ago one of our bright safety students was about to graduate, and with my encouragement he contacted his local ASSE Chapter about potential openings. As a result of this contact, he garnered five interviews in the area of the country where he wanted to live, and received five job offers. He took the position that interested him most and has been very successful since then in his career with that company. Does this story demonstrate a potential benefit of networking with ASSE that could motivate students to become more involved with ASSE?

**Best Practice:** Learn to explicitly frame your material and to shape student listening.

## **Consider Using Personal Stories and High-Impact Examples to Illustrate Your Points**

The most powerful stories are generally those from one's personal experience. However, one can also illustrate important points with second-hand stories from literature and others experiences. Stories can bring dry points to life, and help students better understand the meaning of materials. You may want to work on improving your story telling skills. Stories don't need to be lengthy, but the richer in detail and more relevant to the topic, the better. Not only do illustrations provide a better understanding of the materials, but the topics are more memorable.

I don't know if there have been specific research studies on using stories as tool to aid retention of material, but it seems logical that students are more likely to remember those points poignantly illustrated by the instructor. For example, if you are teaching about safety regulations, you might illustrate the need for the regulation by telling a story of an injury or fatality that occurred because the regulation wasn't in place or because it was in place but wasn't followed. If you are working with an experienced audience, you can also solicit stories from them and expand on their experiences.



**Best Practice:** Liberally use relevant stories and examples that connect with students.

## Consider Using Problem Based Learning (PBL) to Help Achieve Your Objectives for Student Learning

Many disciplines successfully use Problem Based Learning in their classes. The idea is to present the class, or individual groups within your class, a specific problem they need to solve. One form of PBL is a case study that does not reveal the ending – students need to solve the problem. It may be a complex problem that requires some time and research to solve (rather than one class period). Consider using real cases – either problems in industry for example, that occurred some time ago, or problems currently being experienced by an organization. You may be able to work in collaboration with individuals from some industrial organization. Your class and students may not be paid as a consultant would, but they could help solve the problem by offering potential solutions. This work can be beneficial to students as they get a chance to think and work like a consultant with the benefit of the learning. Working to solve these problems and case studies tends to have a much greater impact (including real or simulated experience) on student learning than simply reading materials and listening to lectures.

**Best Practice:** Learn PBL methods and use real(istic) cases to solve problems and enhance learning.

## What Are the Benefits of Making Your Classes and Presentations Light and Entertaining?

Establishing the atmosphere of a classroom or workshop is a basic responsibility of the instructor. Your methods of delivery and facilitation can be light and entertaining while the content matter may be important and serious. Don't take yourself too seriously either. Students and participants are not positively impressed with an instructor's inordinate effort to impress. Sure, safety is a serious subject, but there is no reason why learning can't be entertaining.

Depending on the subject you're teaching, consider using games for learning. Based on student feedback, one of the most popular sessions I've ever conducted with university students is "Safety Jeopardy." Students enthusiastically ask when we can play the game again. My evidence is anecdotal, but it appears to help students learn materials better prior to exams. Developing the material for Safety Jeopardy requires extra time and preparation before the class session, but this kind of participation can be enjoyable and rewarding for everyone when done well.

Games can be enjoyable in the workplace and in the classroom. Dr. Diane Fassel wrote an essay on *Lives in the Balance*, and observed the following about games:

Games have a goal and rules and therefore provide a structure for letting go and having fun. Listening to my interviewees, I began to appreciate that employees have fun when there is a background of predictability (rules, structure, expectations, and goals) and a foreground of unpredictability (challenge, the unknown, problems). Receiving information and having the right skills helps them let go and enjoy a project. The presence of a person who functions as a coach and provides safety is important. (Spears 225).

**Best Practice:** Relax - have fun and make learning entertaining.



## Consider Thoroughly Covering Just One or Two Topics During a Single Class Session or Presentation

Rather than just touching briefly on a large number of topics, thoroughly go into one or two main topics. Even this article, for example, would probably be more memorable if there were just two or three main points instead of twelve or thirteen. One of my teaching mentors, Dr. Charles Byers at the University of Kentucky, taught me that it can be very effective to cover one topic during a class – go into specific detail, ask pointed questions, encourage debate, and have students write a summary on some question or aspect of the topic. You may have also learned that your better conference presentations were the ones where you covered fewer items, and the less effective ones were the presentations where you tried to cover too many items - too many slides, too many ideas, maybe not enough time to properly cover everything you planned to cover.

**Best Practice:** Keep it simple – it's better for students to learn a few things well than to be overwhelmed with an information overload they will soon forget.

### Is There Anything Significant About Students and Audiences Tending to Reflect and Mirror the Mood, Energy Level, and Enthusiasm Projected by the Instructor?

This mirror concept is very powerful and perhaps not often recognized by teachers and presenters. Not everyone in an audience mirrors a speaker, of course, but in general it is true. If you are a teacher and have ever received comments from student evaluations stating that you are not highly enthusiastic about your teaching – these evaluations may not be exactly accurate. Perhaps internally you are highly enthusiastic about teaching and about the subjects you teach. However, if externally you come across as dry or slow and soft in your delivery, students may perceive that you are not enthusiastic about your subject. Maybe this tends to be your natural style, or sometimes you are tired or haven't had time to adequately prepare your presentation. If it isn't your style to demonstrate a high level of enthusiasm, you don't need to fake passion, but for the sake of your students and audience, consider becoming more animated, active, and using variety in your voice and teaching methods.

Here are some simple examples of how an audience can mirror the mood of a speaker: If you smile and are positive, your students/audience will tend to reflect smiles to you and be positive. If you project the belief this session is going to be enjoyable and highly meaningful, and you are enthusiastically looking forward to it, your audience will tend to do the same. If the instructor is nervous or embarrassed, the audience tends to be nervous or embarrassed for the speaker. If a teacher perceives he/she doesn't have anything that useful or meaningful to offer in a session presentation, the participants may be inclined to get up and leave because they are likely to feel the same way. Again, there are exceptions – an individual may think the material is boring no matter how interesting the instructor appears to make it. Perhaps that student should consider another major.

**Best Practice:** Be genuine and learn to establish an atmosphere conducive to learning.

### Should We Place Greater Emphasis on Being a Facilitator of Learning and Less Emphasis on Being a Lecturer of Material?



McKeachie reveals one of his biases or hypotheses regarding his philosophy of teaching: “What is important is learning, not teaching. Teaching effectiveness depends not just on what the teacher does, but rather on what the student does” (McKeachie 6). We need to establish a setting where our students and audiences will do those things that enhance their learning.

During the past decade, education has tended to move away from the emphasis on the teacher to more of a focus on the actual learning that takes place. What are the things a teacher can do to ensure the message intended is the message received? How can teachers ensure students understand the materials? Are there ways to ensure learning occurred that will last beyond the particular course? Perhaps most importantly, are there ways a teacher can make a positive intervention in the lives of students that may influence them throughout life?

One key to being a good facilitator is to gain meaningful student involvement and participation. Encourage discussion and questions, set up small group activities with relevant objectives, let students and audiences know that you expect participation. Dan Petersen notes that lecture is the least effective method for training and learning: “The lecture method is probably the oldest, cheapest, and least effective technique available to a trainer” (Petersen 61). Yet, for various reasons, lecture tends to be one of the most common methods used at the university level. One approach to lectures is not necessarily to avoid them altogether, but intersperse brief (approximately 5 to 15 minute) lectures with other activities. Even during your “miniature” lectures, encourage discussion and questions – ask your own questions and expect audience participation. Unless you are a world class lecturer, you are probably better off to steer clear of 90 minute or even 45 minute lectures.

**Best Practice:** Ditch lengthy lectures and become a skillful facilitator of learning.

## **Is It a Good Idea to Encourage Students and Audiences to Give the Instructor, and Each Other, Their Answers?**

Try getting your students to teach you material, rather than providing all the answers yourself. Even worse, don't pretend you are the source for all the answers. Don't act like you think you know all the answers. Pretending to know all the answers is a heavy load to carry. One of my teaching mentors, Dr. Scott Geller, a Psychology Professor at Virginia Tech, observes that good leaders don't know all the answers – but they know the right questions to ask.

Stephen Covey notes, “Almost everyone acknowledges *you learn best when you teach another...*” Dr. Walter Gong taught a one-semester class for faculty entitled *How to Improve Your Teaching*. The essence of his program was this great principle: *The best way to get people to learn is to turn them into teachers* (Covey 32). Covey applied this principle when he first began teaching. He reports that his class size increased from fifteen students to some classes with nearly a thousand students, yet the students' performance and test scores actually improved. He effectively applied this principle by allowing his students to become teachers.

A good teacher knows the questions to ask to get students to think; to stimulate analysis, problem solving, and arriving at their own answers. To get better quality answers, let students know prior to the class session that you will ask them questions about the topic, and you expect them to provide intelligent answers (or even to give brief reports to their classmates). Another technique that can work well, is to divide the class into small groups, write the questions on the board or display them on PowerPoint, have each group discuss them together, and share their collective thoughts with the rest of the class. Instructors



should be generous with praise when good answers are given and tactful with correction if the answer is not what the instructor was seeking. No one likes to be embarrassed in front of their peers – this is one of peoples’ top fears, especially young people. Establish an open and non-threatening atmosphere conducive to learning – one that is relaxed and devoid of fear or embarrassment. It is your responsibility as instructor to establish an atmosphere conducive to learning – this is a skill that can be developed.

**Best Practice:** To enhance learning, turn your students and audience into teachers.

## Consider Using Peer Evaluations for Continual Personal Improvement

My observation is there is a tendency for professors to personally think we are better instructors than others think we are. Don’t be afraid to have peers evaluate your instruction and give you feedback. Although many instructors appear reluctant to volunteer for peer evaluation, it can be very helpful. Choose someone with experience, one you respect who is sensitive and will give you honest feedback. Peer evaluation can be highly beneficial to the instructor who listens and makes needed changes. You may have discovered you can learn a lot from respected evaluators, including things you didn’t even know about or were unaware of before the feedback was given. For example, Dr. Jennifer Robinson, an internal consultant and Director of The Scholarship of Teaching and Learning at Indiana University taught me about the technique of Problem Based Learning (PBL). Dr. Robinson visited my class and stated in her opinion I was teaching at a high level, but could enhance my teaching with the addition of PBL. After her evaluation I researched and began using some Problem Based Learning techniques in my courses.

**Best Practice:** Seek professional assistance to develop your strengths and opportunities.

## Consider Using Self Evaluation to Analyze Your Performance

Dr. Wilbert McKeachie, quoted earlier, is an expert on teaching improvement. McKeachie notes, “One key to improvement is reflection – thinking about what you want to accomplish, and what you and the students need to do to achieve these goals (McKeachie 6 – 7).

Dr. Mohammad Torabi, one of my mentors and Department Chair and Chancellor’s Professor at Indiana University, has a technique he uses for self-evaluation of his teaching. After he teaches a class, Dr. Torabi asks himself, “If I were a student in my own class, would I enjoy the class and learn from it?” Although it is more difficult for us to see ourselves objectively than for others to see us as we are, we can nevertheless observe our own methods and effectiveness of execution, then make systematic improvements based on this self observation.

Research from psychology and experience in behavioral safety efforts demonstrate potential advantages of conducting self-evaluations. Self-observation offers a way to systematically improve one’s teaching performance. My suggestion is to develop a meaningful checklist, and consistently focus on those areas that offer the greatest opportunity to positively impact your teaching. See example checklist at end of article. If this makes sense to you, consider designing your own checklists to effectively address your strengths and weaknesses.

**Best Practice:** Develop systematic self-evaluation methods for continual improvement.



## Ask Friends in Your Personal Network for Ideas

Finally, network and learn from others in ASSE's Academic Practice Specialty and any mentors, peers, or respected teachers you know who willingly share their ideas. Don't ever stop learning – just as leading organizations are learning organizations, so leading teachers are learning individuals.

Alan Weiss says teaching is the noblest of all professions, and dedicates his book *Million Dollar Consulting* to teachers. We do meaningful work, we have an opportunity to contribute greatly and make a positive impact on our society. We should be delighted in our profession, but never satisfied because there is always room for improvement. If we work diligently and intelligently at it, we can continually improve our teaching and presentation effectiveness. We have important, potentially life-saving content to share. The more effectively we can facilitate learning and establish the groundwork for student motivation, the greater impact we can make in our field.

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## Example Self-Evaluation Checklist

### A. Class Preparation

- How clear am I about how this topic fits into course objectives?
- Have I clearly conveyed the specific objective(s), including potential benefits to students, for this class?
- Did I give students specific questions to answer prior to this class, and/or a quality assignment to prepare them to arrive ready to intelligently discuss the material in class?
- Have I prepared meaningful handouts, website locations, or mini-lecture materials as appropriate?

### B. Student Engagement

- How engaged were students in the topic(s)?
- What percentage of students were highly engaged?
- What techniques did I use that encouraged and facilitated engagement?
- How well did I reinforce students for thoughtful answers and involvement?
- What techniques should I consider using next time to increase engagement?

### C. Content Enhancement

- How well did I use relevant stories and examples to illustrate the content?
- Did I effectively use visual media to supplement the material?
- If appropriate, did we conduct any hands-on or demonstration techniques?
- Did I effectively project my enthusiasm and passion for the subject matter?
- How can I do a better job of enhancing the material next time?

If I were a student in my own class, **what grade** would I give myself for today's session? **Why?**

What **one thing** could I do differently next time that would have the single greatest impact on my teaching and on student learning?