Creating Active Lectures

A Teaching For Success Focalite
Why Take This Focalite?

This Teaching For Success Focalite (FL) is designed to help you transform the common, traditional, ho-hum, sleep-inducing lecture or presentation into an active, energizing and memorable learning experience. It will help you create an active lecture session that will involve your students directly in learning the content in a way that is as efficient, effective and memorable as possible.

Group, team learning, community-based learning, service learning, discovery learning and computer-based learning are among some of the many instructional design strategies in use today. However, a main-stay for many instructors is still the traditional classroom lecture or presentation. Why? Lecturing is the most used teaching method experienced by a majority of students at some time in their educational careers. Therefore, the traditional lecture seems familiar, easy to prepare and comfortable for noneducation majors who now as professionals in government, business and industry and nonprofit organizations and institutions become involved in teaching, especially as adjunct or part-time faculty.

However, the traditional, 50-minute or more, nonstop lecture goes against many of the principles of learning developed from cognitive science in the past two decades. Conclusions from learning studies suggest that all learning activities including lectures should be made more active and tailored to fit the learning needs of a diverse student population.

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A TFS Tip

Teaching For Success strongly recommends that instructors always view lecture as only one of many possible instructional strategies. However, designed properly, i.e. short, illustrated, activated and real-time assessed lectures, constitute an effective learning activity.
What is an active lecture?

Active lectures are a far cry from the traditional lectures that you may have sat through as a student. They are comprised of short presentation segments (no segment more than 20 minutes in length) and feature much more student involvement and demand students that share responsibility for learning.

An active lecture can be an engaging, energizing, thought-provoking learning experience as contrasted with the traditional lecture that can be a dull, boring and stupefying experience.

The outcome of an active lecture depends on your skill at creating, organizing and delivering your presentations and designing quick learning checks, participative exercises, condensed small group discussions, learning games, etc. In addition, a component of success with the active lecture method of teaching is the strength of your own personality that you project and your style of presentation that you choose.

It’s not just multimedia

Even in the age of easy computer animations and glitzy Powerpoint shows there is still much to be gained when a student participates in a live discourse with a learned fellow human. Creating an active lecture does not mean transferring your entire lecture to a PowerPoint presentation, clicking the play button and relaxing while the computer runs a slide show.

Many well-meaning instructors use so many special effects and animations that an over reliance on programs such as PowerPoint actually detract from the learning experience it was meant to enhance. Activating lectures means more than using PowerPoint or playing more videos in class. Multimedia certainly does have its place in helping you communicate ideas, procedures, principles, comparisons, simulations and “what if” scenarios that cannot be communicated effectively by any other means. Active lectures use a balance of communication channels from media to oratory and constantly checking to see what students are actually taking away from the experience.

Basic principles

How can you improve your presentations to the point where your students’ full learning potential is realized? The basic rule is to **think more creatively and actively** when planning lectures and class presentations. Adapt lectures to your students’ need for stimulation and participation.
How to Activate Your Lectures

by planning and implementing interactive exercises and activities. In addition, there are special tips and techniques designed and proven to enhance the learner’s interest that will be explained in this Focalite.

The first fundamental question to be addressed is, “Why lecture at all?” Following this brief discussion you will find suggestions useful in thinking about lecture in different, nontraditional ways. Different students have different learning expectations, styles and needs. The traditional lecture delivery style is not a one-size-fits-all learning experience right for all of your students. To be successful you need to activate your lectures.

In a nutshell, activate your lectures by considering the needs of your students, and choosing techniques applicable to engaging your students with the lecture material that has the best chance of gaining and maintaining their attention.

This Focalite is designed for anyone lecturing in any subject area. The tips and techniques you will learn will help you whether you are delivering a one-time presentation or a series of lectures semester-after-semester.

Time required

If you are willing to invest 60-90 minutes in learning how to create, plan and implement active lectures and learning presentations, you will secure long-term benefits for you and your students. Plan to study the recommendations and then apply the techniques of your choice.

Experiment with what you learn and adapt the ideas to your specific needs. We expect that you will then want to tweak these concepts and suggested approaches and tailor them to your teaching situation. Finally, for maximum benefit, plan a time of reflection, evaluation and modification after you experiment with these approaches in your classroom to access their effectiveness for you.

Learning process

Focalites are designed to help you while you teach. We recommend that you keep a copy of this QC on your personal desktop or notebook computer so that you can easily refer to it as needed.

This QC is designed to be an active learning experience. There are blank fields provided to fill-in and use to add personal notes, and to answer review questions. Just click and type in these fields and then save your work.

We hope this QC will motivate you to select one or more of the described techniques and apply them to a class session, then reflect on their success and make changes to better meet your needs and the needs of your students.

No doubt you may have taken a class during your graduate or undergraduate work from an instructor with an uninformed view of lecturing. If so, you may remember sitting in class trying to fight off drowsiness, knowing that this class...
is a sure cure for insomnia. Did it ever cross your mind while sitting in such a class, “If I ever become a teacher, I’m going to make this more interesting”?

Now that you are a college instructor, you have an opportunity to do things differently for your students. But perhaps, you’ve discovered that presenting in an interesting manner doesn’t seem very easy, does it? Are you wondering right now how you might improve the least interesting and most jumbled lecture of your course?

Not to worry, you’ve connected to the right resource. This Focalite will provide you with the tips to better organize, energize and evaluate your lectures.

Benefits to you

The benefits of activating your lectures include:

- Better lecture organization.
- Increased attention and participation.
- Boosted knowledge retention.
- Reduced tardiness and skipping of classes.
- Amplified confidence in your teaching skills.
- Increased enjoyment of teaching.

Furthermore, this Teaching For Success Focalite will help you determine when lecturing is most appropriate, what points to consider when planning the lecture, how to maintain students’ attention, and what to do when your lecture is not going well. By using the recommended lecture activation techniques you will make your courses more interesting and enjoyable for you and your students.

To be a better presenter...

- Carefully listen to and watch good speakers wherever you find them: in a religious setting, on the evening news, at the local service clubs or your colleagues’ classrooms.
- Evaluate what experienced teachers and professional speakers do right and what are they doing wrong. Then, add the good practices you observe or listen to your own presentations via recorded media. Sit in (with permission) on other classes and learn from what you see and hear.
- Take control when a long-winded student inappropriately grabs the class’s attention with a string of questions or rebuttals; interrupt if necessary by summarizing a point the student has made and then continue with your presentation.
- When you sense hostility or reluctance to participate and you don’t know what is going on, the best strategy is to stop your lecture and make an honest inquiry into the nature of the problem. Clear the air and continue with your lecture.
Do Real Teachers Still Lecture?

Absolutely! Competent, effective teachers today are proficient in a variety of instructional strategies and employ a range of learning activities to achieve the learning outcomes they desire. Lecturing and presenting are still effective and valid methods of teaching.

That said, it’s crucial to learn the principles, concepts and techniques that active lecturers use. Active lecturing is not something that you can just walk into class unprepared and expect to do it well. The very worst lectures are those given by instructors who are convinced that lecturing consists solely of talking glibly about the subject.

Your turn:

What is your philosophy on lecturing as a teaching option? Why do you feel this way? Why do you lecture? (Remember to print this page to save your comments.)

Finally, remind students that following the student code of conduct is a sign of respect they offer you, the school, their classmates, themselves and those who have helped them get to college.

Why lecture?

Certainly one of the least defensible reasons to lecture is to reiterate what the textbook teaches. Not only does this create a boring atmosphere, but it also decreases the students’ motivation to complete reading assignments.

This situation in turn decreases the likelihood that your students will develop an interest in the subject and read other sources on their own. In addition, lectures should not breed student dependency on the instructor to communicate all that needs to be learned.

The Lecturer’s Code

I will not bore my students with content they can better learn by textbook, handout, internet, discussion or practical application.

Through my well-prepared, active lectures, I will share my enthusiasm and respect for learning and the subject that I teach.

I will lecture in short segments, involve students and assess learning regularly with well-crafted, in-depth questions.

I will find ways to illustrate and explain difficult concepts and thank my students for attending classes.
To get a handle on some of the better reasons to lecture, ask yourself the following questions:

- What are the characteristics of the students taking my course?
- What are their ages, interests, goals and former learning experiences?
- Why are they taking my course?
- What should they be able to do and know at the completion of a chapter and the course?
- What information and skills will be most important for them to retain at the end of this semester? In two months? In a year?
- How will this information be useful to them in their college classes or future careers?

When you answer these questions honestly, you will begin to form a picture of the what your students must learn, (not just nice to know) and how these must-learn knowledge, skills and attitudes should be organized and formatted to engage, involve and energize your students.

Of course, a recognition of student learning styles is a consideration when planning an active lecture. Your students have developed preferred learning styles (visual, auditory, hands-on). Therefore, to optimize learning for all your students, you must include all three modes of learning within an active lecture. Since auditory learning is already strongly present in lecture, the problem for you may be creating ways to increase the visual and hands-on learning components of your lectures.

The computer, coupled with the digital camera, digital video camera, scanners, printers and presentation software and whiteboards linked to printers have made it easy to boost visual learning experiences with the use of graphs, flow charts, tables, animations, simulations, PowerPoint slides, overhead transparencies and video clips.

And, you don’t have to be responsible for providing 100 percent of all the visuals needed. Students can create visuals as part of their learning projects. Also, your college computer network can distribute these visuals 24-7.

There’s no excuse today for a lecture to be given without at least some visual learning components. Visuals don’t have to be complex and adorned with Hollywood special effects. Simple line drawings, knowledge maps and comparison tables will often do the job — making the abstract more concrete.

Hands-on learning

The most difficult task of creating an active lecture may well be incorporating hands-on learning components. This may seem more difficult than it actually is. Here is one approach. For each 20-minute lecture segment create one two- to four-minute learning experience that breaks the class into dyads (dyads are quick to form by asking students to turn to a neighbor and work with that person on the mini-learning task).
For example, a brief hands-on learning task is the “What if?” learning task. Pose a “What if...?” problem. Ask dyads to discuss and list five action steps in two minutes that they would take in the event the “What if” situation actually occurs. Spend the last minute or two of the exercise randomly calling on several dyads to report their action steps and write three or four of the lists on the board or an overhead transparency. Finally, ask the entire class to vote for the best list and then give several reasons for the winning list being selected as the best.

Or how about, “Rank the Idea.” Ask dyads to list all the ideas, concepts and principles that they can remember from the lecture segment in one minute (you be the time keeper). Then give your students two minutes to rank order the items in order of importance to understanding the material. Spend the last minute of the exercise calling at random on several dyads. Ask them to report on their list and why the top item was rated number one in importance to them.

There are literally thousands of possible mini exercises that you could create and use to involve your students in the lecture material and give them an effective hands-on activity that can be accomplished in the space of five minutes or less. All you need is to think creatively and actively about your subject.

**When To Lecture**

Part of teaching today is knowing when to use a particular learning strategy and when not to use it. Active lecture is a very appropriate teaching method for:

- Summarizing readings.
- Analyzing new information not available in other formats.

**Summarize readings**

For instance, lecture is a great way to summarize the main or most complicated points of the reading assignment (Newble & Cannon, 1995). McKeachie (1999) also supports several reasons to lecture.

**Analyzing new information not available in other formats**

Lecture is an excellent way to provide students with up-to-date information. Remember, the book you are using was probably published a few years ago. Even if a brand new text is used, it will not include any breakthrough studies from the current year.

Along these lines, lecture can also be used to summarize points from a variety of sources. The best instructors include information from journals, professional and popular magazines, television, the World Wide Web, newspapers, discussions they have had, anecdotes from real-life experiences and current events.
Adapt information to specific learner needs

Lecture also provides an excellent mode to allow adaptation of information to the audience. For instance, one class may desire specific information and examples because they share some specialized background while another class may want general information because of their diverse background.

Demonstrate thought process and applications

Finally, McKeachie states that lecturers can teach students how to think, when they present information in a logical, coherent fashion. Even though the textbook demonstrates good organizational thinking, many students need you to amplify the major points and clarify confusing points.

What’s more you probably speak in a more conversational and friendly style and tone than the language used in most textbooks. Through lectures you can demonstrate how an expert approaches and solves a problem in this subject area. Furthermore, unlike textbook learning, you can respond to your students hunger to know how theoretical concepts are applied in the world outside of academics.

Your turn:

In the field in right-hand, column, please list three ideas you learned from this section and state how you will apply this information to your next course or class session. (Remember to print this page to save your comments.)
Five Steps to Better Planning

Begin your active lecture planning by characterizing your audience. This is the most important question you could ever ask as a speaker who must tailor each presentation to the needs of the audience. For most instructors this means planning somewhat blind. Course, lesson and lecture plans must be at least roughed out before you ever meet your students.

Make assumptions

It’s better to make some educated guesses about the characteristics of your students and plan your lectures using these assumptions before the term begins than to wait until classes begin and try to play catch up the whole term. But keep in mind at least some of your assumptions will be wrong and adjustment will need to be made when your class is underway.

If this is your first time teaching, the best source of likely student characteristics is your department chairperson, or a full-time faculty member in your department. The very best method to learn about students would be sit in on a class and observe the teaching-learning process the term before you begin teaching.

One of the characteristics that you definitely will want to know is the age range and the percentage of students coming from high school or just beginning higher education and the percentage of students returning to college after gaining work experience or raising families. Students in their late teens and early 20s will have much different needs than those in their 30s, 40s, 50s. Mature students over 60 will again have different needs, goals and expectations than their younger counterparts.

The more you know about your students and their needs, interests and experiences, the better you can frame your lectures throughout the term to mesh with those points of engagement. If you are new to teaching, just changed institutions or assigned to a new course, your planning will be based, out of necessity, on your assumptions. Sure, sometimes we find out later that our assumptions weren’t accurate, but don’t use this as an excuse for not planning your lectures. Failure to plan will produce far worse results than planning your course based on some inaccurate preterm assumptions. Besides, you can check your estimates as soon as the course begins.

Verify assumptions

Good lecture planners will verify their assumptions on the first day of class by asking their students who they are and why they are taking the course. By asking they not only get to know their students’ perception needs (“I heard it
was an easy course”, “I need three credits in Biology”, “I really enjoy studying Anthropology”, etc.), but you are also getting to know their goals, objectives and what is important about the course in their perspective.

Knowing this information, you can modify your initial lecture plan if necessary and avoid the pitfall of presenting the material in a fashion that is not appropriate to your class.

Part of good lecture planning is ascertaining what your students already know. This can be determined by a brief survey or diagnostic test at the beginning of the term. Just because prerequisites are listed for entry into your class, they do not ensure that all your students will have the entry level knowledge, skills and attitudes necessary to succeed in your class.

Once you have confirmed your assumptions about who your students are and their experiences and academic readiness to tackle your course are known, you can choose much more accurately the content, organization and context of each lecture.

**Can you make a difference?**

What do you bring to the learning table? What is it that you and only you can add to the student learning experience by lecturing or presenting? This is a key question.

Do you have practical experiences, unique perspectives, or research results that you can share with your students best by lecture? Once armed with an array of answers to these questions, you can now determine the specific type of active lecture you will give to achieve specific learning goals or outcomes.

**Choose an optimum format type**

There are two very popular lecture organizational formats to choose from. The first is a conclusion-oriented lecture. This lecture is organized by the content and topics that you summarize for the students (McKeachie, 1999).

The second type of lecture is problem-centered because you require your students to analyze information (Newble & Cannon, 1995). For instance, you may pose a question or a case study before the lecture.

During the lecture, you coach your students to create hypotheses, analyze information, and provide evidence for their answers (McKeachie, 1999, Newble & Cannon, 1995). You may need to spend more time and effort to plan a problem-centered lecture, but this type of lecture encourages greater active participation and teaches students various ways of thinking.

The problem-centered type of lecture also allows more chances for in-class group work to occur. The groups work as teams of students whose task it is to come up with various parts of the problem or its solution.
As a variation, teams can compete to solve problems quickly in quasi-gameshow formats with the winning team receiving extra-credit points or candy bars or some other prize.

Organize the content

The next step is organizing lecture content. It works well to use one of the common-knowledge frameworks to structure your lecture. Here are several examples:

- Simple to complex progression (the most common organizational scheme).
- Near to far — a geographical framework.
- Past to present — an historical perspective.
- Problem to solution — a problem-centered approach.
- News story format: who, what, why, when, how.
- Broad application and its personal impact.
- Present to future — predictive.

Once you choose an organizational framework, draft the information in segments one main point at a time, so that you will have clear starting and stopping points (Nilson, 1998).

Blocking will make it easier to organize or skip information later. Also, write these segments so that they are no longer than five- to ten-minutes each. Most students' minds start wandering after 10-20 minutes of listening (McKeachie, 1999); therefore, this allows the discussion of a few key points before minds begin to drift. Another organizational tactic to keep students' attention is to write keywords or an outline of your lecture on the board or overhead (Greive, 1995) or as a series of handouts you provide for every class session.

Plan the visuals

To make your lecture even more appealing and effective, include visual aids. Graphics may run the gamut of a PowerPoint presentation, pictures or illustrations, outlines, handouts, physical models or demonstrations. However, illustrations or drawings need not be complex or great in number. Remember on the upside a good visual may say 1000 words but on downside the listener's train of thought is interrupted. In addition, some students will try to redraw the visual in their notes and fall behind the pace of lecture. Therefore, make sure that each visual is absolutely necessary for clarification of the content and copies are available.

When using a chart, table or graph as a visual, it's a very good idea to provide your students with a handout. Otherwise students will take up the task of trying to redraw or sketch the visual in their notes and in doing so they will likely fall behind in absorbing the information or miss a crucial point. When you provide a visual in a handout, students can quickly highlight important sections of the table or graph and make a mental note of the point of the visual.
You may also want to enlist the help of your college's media department, your secretary, or even the local printing shop. Professional looking visuals will make the information more interesting and make you look more competent.

Another idea for an effective handout: provide an outline of topics and enough space for notes [these are called guided notes] (Greive, 1995; Nilson, 1998). If you write all the information for them, students’ thoughts are more likely to drift from the topic. On the other hand, students are more likely to become lost if no organization is given.

Putting it all together

According to Gagné, Briggs and Wagner, your 20-minute active lecture segment should be constructed to, “provide a set of events external to the learner designed to support the internal processes of learning.”

These three educational researchers provide a nine-step model that will “support the internal process of learning.”

The nine steps will be paraphrased here to make them easier to understand. The examples included in these steps are not meant to be all inclusive. Precisely how you accomplish each step is as unlimited as your imagination. The important point is to include all the steps.

The steps to giving an outstanding active lecture are:

- Get their attention: show a cartoon, start with a quote, a startling statistic, a crucial problem.
- Declare the purpose and objective: Students need to know where this session is headed. This technique is referred to as an advance organizer.
- Connect: Briefly review the previous lesson and build bridges to the new material from an understanding of previously learned.
- Engage: Present to your students the new material to be learned, i.e. present the problem, summarize the readings, describe the case study, define the terms and list the procedures, etc.
- Guide learning by: defining terms, questioning concepts and values, organizing principles, demonstrating procedures, synthesizing new ideas the fundamental parts, evaluating ideas and applying the new knowledge to practical situations.
- Apply the learning by activating the students; involve them in discussions, evaluations, writing a paragraph, making a table, forming a list, drawing a graph, solving a problem.
- Evaluate their work by: group reports, a sample of students sharing their work with the class, spot questioning of several students or even a 3 x 5 card survey of student conclusions.
- Provide improvement suggestions: Explain how this knowledge might be learned and applied better, cheaper, faster or more widely; students need instructor critiques.
Cement the learning: Design one last application exercise of the new knowledge before ending the lecture or class session; this will serve as a review and make this lesson memorable.

Rehearse and relax

The last step of your planning is to rehearse your presentation. The key here is to create a mental or visual image of the flow of your lecture points. I visualize taking my students across a stream on stepping stones. The stones represent the points of my lecture. This image will help guide your presentation and allow you to speak naturally and not be tempted to read your lecture from detailed notes.

Practicing allows you to monitor your presentation for time as well as to discover whether you forgot points you wanted to discuss (Newble & Cannon, 1995). Consider your rehearsals like an actor would before going on stage for opening night. While you are not expected to memorize the “lines” of your lecture as the actor must memorize the lines of his script, you must become familiar with the order in which you will be presenting the material. (Make a map of your lecture using the River Crossing method of planning a presentation described on page 15 of this FL.)

Are there any parts of the lecture that seem too long to you? Maybe you feel you are reaching a point in the middle of your lecture. Rehearse an attention-getting device wherein you will ask for student feedback or tell an informative story concerning the material.

Rehearsing will build your confidence and will allow you to present a more polished presentation for your audience.

But don’t over do it

Some warnings about rehearsing: Don’t rehearse to the point where your delivery will become wooden and stilted. Allow for some spontaneity and flexibility. You need the ability to respond to the moment and switch gears as student responses or lack of responses dictate.

Lastly, anticipate questions your students will ask. Make a list of these questions and if students don’t ask these questions, sprinkle them throughout the talk. If you are asked a question that you don’t know, relax, don’t get defensive or flustered. Remember, no one has a corner on the information.
Inform the student that you will research this excellent question and have an answer ready for next session. Or as an alternative make the question an Internet or library research question for the entire class.

**Check the lecture environment beforehand**

The prepared, professional instructor always strives to arrive at the classroom as early as possible. This will allow him or her to:

- Chat with his students.
- Orientate himself to the room.
- Inventory the media equipment.
- Check this equipment for proper operation.
- Lay out materials.
- Write an advance organizer on the board.
- Check lighting, noise, ventilation and seating arrangements.

Of all the items on this list of reasons for arriving early to your classroom, the most important is the equipment check item. This is especially important if you are relying on sophisticated technology such as a classroom wired for distance learning.

Also, have a back-up instructional activities plan readily available to implement just in case you encounter equipment malfunctions.

Arrive early for class and be ready for the unexpected. Then, when equipment fails, the door is locked, the heating system fails or any number of unexpected conditions occur, you will be able to seamlessly switch instructional strategies or lecture types.

And, you will have the time needed to remedy simple problems without losing the whole classes’ attention and respect as you spend ten minutes of valuable class time fiddling with a balky LCD projector. If you project the attitude that class time is valuable and not to be wasted, this attitude will go along way toward sending the message to students.

Your turn:

*What ideas in this section make most sense to you? List these ideas, and note how you can apply these techniques to improving and activating your next lectures. Remember to print this page to save your comments.*)
Delivery, it’s paramount

You can have the most exquisitely organized lecture with a wide assortment of media clips, Powerpoint shows, guided notes and supplemental handouts, but if your delivery or demeanor is amateurish your lecture will be a waste of valuable learning time.

There are several foundational behaviors that must be incorporated into the delivery of a successful presentation.

What do you project?

Confidence in your ability and authority to teach is so important to presentational success. Listeners can sense insecurity and doubt in another person a mile away. Confidence is built not gifted; therefore, you must gain confidence by practicing and developing your presentational skills, knowledge and attitudes.

I’m sure you’ve experienced sitting in a classroom where the first thing the instructor did was apologize for being part-time, inexperienced, overloaded, etc., which resulted in your wanting to drop the class or leave the classroom as soon as you could. Your students expect that you are capable or you would not be chosen by the college or university to lead the class.

Speaking from the experience of one who suffers from speech fright, I can recommend several concrete things you can do to boost self-confidence and reduce anxiety.

The River-crossing method of organization

First, prepare your presentation and lectures by creating a logical outline of where you will start and where you will end. One of the best strategies I have ever learned about preparing for a presentation or lecture is to think of the lecturing process as laying stones (content blocks) across the river of unknown. These stepping stones of knowledge must be logically and selectively laid so that your students can use them to advance safely across the river to the far bank that represents new knowledge and skills.

Visualize standing on the bank of “where the students are now in their understanding of the subject.” Then list or describe briefly the state of this jumping off point to new understanding. Next, jump to the far bank and make a list of the major new pieces of knowledge, skills or attitudes that they will now know upon arrival there. Using this list, create the stepping stones they will need to intellectually cross the chasm without having to take giant leaps of faith and possibly falling into the cold river. Once these stepping stones have been defined, you have the body of your lecture neatly outlined. [This excellent idea is credited to Decker Associates Inc., Needham, MA]
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Constructing this simple mental picture of the structure of your lecture will go a long way to reducing performance anxiety and over dependence on notes, overheads or textbook page flipping. You'll find you will be able to talk more confidently and naturally and your presentation will flow from point to point.

Now your students will be much more likely to follow your thinking and be able to take notes without confusion. Nothing shoots holes in your self-confidence as readily as when a student raises his hand and comments, “I have no idea what your are saying.” The best way to keep this from happening is to take the time to carefully choose logical stepping stones.

Visualize a successful delivery

Once you have an outline of your lecture well in hand, prepare yourself for a successful lecture experience. First, take a moment and visualize yourself giving an enjoyable, fun, energizing talk that sparks many insightful questions from your students.

See yourself enjoying the lecture experience — thinking clearly, speaking confidently, making eye-contact with your students and delighting in the human-to-human interchange of ideas and learning.

Next, calm yourself with a few minutes of deep breathing exercises. Inhale and exhale slowly and easily from your lower abdomen. I find doing a few simple Qi Gong exercises for even a minute or two prior to a lecture very helpful to relaxing before speaking to a group.

I started my teaching career with a mistaken concept of good lecturing. I thought it should be done in a rapid, excited manner to capture and maintain student attention. The best presenters are enthusiastic to be sure, but their enthusiasm is projected with a calm, clear voice that is easy and pleasant to hear.

Experiment with your delivery to find your natural speaking rhythm and tones — a combination that communicates who you really are to your learners.

One of the best ways to begin a lecture is to pose a question that intrigues your students. One of the best ways to end a lecture is to answer the question or even better use a cliff hanger. What is a cliff hanger? This is a continuation technique that makes it appealing for students to return for the succeeding lecture.

It works just like the typical television soap opera or dramatic series. A few minutes or seconds before the end of a lecture introduce a story or a portion of an interesting (did-you-know) fact. Unfortunately, time always runs out and the story, new problem, or interesting fact can only be partially communicated. Students now are faced with a cliff hanger and must return on time to the next class to hear the rest of the story. [Credit for this idea goes to Howard Rosenthal, Ed.D., Program Coordinator, Human Services, Professor St. Louis Community College at Florissant St. Louis, MO].
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Road maps to learning

Experienced instructors usually offer advance organizers to their audiences. An advance organizer is like a road map that you post at the beginning of your class session of what will come and what are the instructional goals for this session. A list of your highest-level lecture outline points listed on the blackboard or on an overhead as students arrive is a good example of a simple advance organizer. According to West, Farmer and Wolff, *Instructional Design Implications from Cognitive Science*, a main feature of an advance organizer is that it will act as a bridge between what the students already knows and what they are about to learn.

Prepare your students for learning

When starting your lecture, remember that gaining the students’ attention is crucial. Students need your help to make the transition from a previous class, job, a long commute or other event that is still capturing their thoughts and concerns. At the outset of your presentation, you must provide something that grabs students’ attention yet does not jump immediately into new material that they may not be ready to learn. Successful transition-to-learning ideas include:

- a brief review.
- a story.
- a cartoon clip riddle.
- a question.
- a case study.
- a quote.
- a news item.
- a little known fact of interest.

It’s also effective to ask several students what they want to know about the current session topic. Their answers can then lead to an opportunity for you to explain the purpose and organization of the lecture and how it will address student concerns. A discussion of this sort will help learners stay engaged, take notes, respond to questions and participate fully in active learning segments.

It’s imperative to connect the current lecture’s purpose with that of past lectures (Nilson, 1998). Since students may not be forthcoming with questions or comments, always prepare your own.

Ask the entire class to consider your questions or comments. It’s not a good idea to put shy students on the spot. Use your creativity to make answering questions fun. Students usually enjoy the opportunity to be assigned to teams and compete for extra credit by correctly answering instructor-prepared lecture review questions.

Maintaining Attention

Once you have the students’ attention, you need to keep it. Maintain attention by presenting information in brief segments, lasting only 10-20 minutes each (McKeachie, 1999). Even while presenting the lecture, allow stu-
How to Activate Your Lectures

Dentists to be interactive. Encourage students to interrupt and ask questions. And ask them questions to assess their knowledge, promote application, and hear their opinions.

Also, pay attention to their body language. When students seem to be losing attention, quickly summarize the segment, and stop for a task or activity to stimulate students’ interest [You should have at least three short active learning segments ready to go at all times!] (Greive, 1995).

Activities include discussing the relevance of the content to their lives, brainstorming for a case study or scenario, asking students to compare notes, demonstrating a concept with a “mini-lab,” asking students to summarize what they believe is important from the lecture, completing a small group activity, or doing a classroom assessment technique.

Many tips on these innovative classroom tools are explained in issues of Teaching For Success Monthly. This informative and exciting way to learn about new developments in teaching is available from Pentronics Publishing. Go to teachingforsuccess.com to learn how your institution can subscribe to this periodical for you.

Your turn — self assessment:

What are your strengths as a lecturer?

What would like to improve about your delivery?

Review Question:

Think about your next lecture. Using the river-crossing method of planning and visualizing your talk, describe the conditions on the shore from where your students will leave; create your major knowledge stepping stones, and then list what they will know when they reach the far shore. (When done, print this and the next page to save your responses.)
When Things Get Boring

Why do students become bored? And what can you do about it?

Obviously, the biggest problem with the lecture and presentation mode of teaching is that an extended period of one-way communication can lull students into boredom through a lack of involvement in the learning process. So what areas of lecture should you be concerned about and what can you do to mitigate some of the problems that arise from the lecture mode of teaching?

Not enough to do

First, and most importantly, chunk your lectures into sections that take a maximum of 15-20 minutes each. Designing even shorter segments can have benefits depending on the age of the students, the complexity of the material and the number of students in the class.

Chunking your lectures in small pieces opens the possibility of incorporating many types of learner-response...
activities. Today’s lectures are geared toward more active learning styles. Here are some suggestions to demonstrate to you how you can adapt lectures to active learning paradigms. Active learning means creating more opportunities for your students to become actively involved with the material they are learning. For example, activate your lectures by designing a series of **One-minute Response** activities that can be inserted into your lecture every five minutes or so. Try some of these super ideas or modify them to suit.

- Students have one minute to compose an answer on a 3 x 5 card to a review question centered on the lecture topic just discussed.
- Then, select five students at random and ask them to quickly read their answers. The best answer wins five bonus points.
- Ask your students to rapidly pair up with an adjacent peer. The student on the left is student “A” and the one on the right is student “B”. Student “A” asks student “B” a review question about the segment just taught. Select one pair for evaluation. They announce the question and answer to the rest of the class. Ask for evaluative applause. If the applause level is high enough, (teacher sets level, of course,) this student pair earns five points extra credit.
- Have a 30-second timer and a sponge, ball or bean bag handy, something soft that you can toss to the students. The student who catches the object has 30 seconds to identify one important point he or she just learned from the lecture. A good answer earns 5 extra credit points and a poor or nonexistent point costs the student five points. This student then tosses the object to another student who has 30 seconds to identify another important point and wins or loses five points. Stop after the fourth student responds or two minutes have elapsed.
- Write, or better yet, quickly uncover a review question on the board, overhead slide or large screen LCD computer screen projector. Ask students to form pairs, discuss the question and formulate an answer in 60 seconds. Call on several pairs to their report answer. Award extra-credit points for a quality answer.

Use **active learning principles**

These are just a few ideas that you can use to energize and reinforce learning during a lecture. Use your imagination and create and employ your own one-minute review activities at least once every 15-20 minutes of lecture. These change-of-pace activities will really make a difference in the energy level in your classroom and will make learning much more fun, rapid and long lasting.
Sometimes you and your students will need a more active break that hooks learners back into the learning task. This is the perfect time to add more movement to the student responses at the end of a mini lecture. For example, you could ask a rating question such as, “Where do you stand on this issue?”

To make this an active learning task, designate a wall of the classroom where students can order themselves in a line — a human graph. Explain they are to arrange themselves in an order consistent with their stand on the issue in question ranging from one to ten.

Tell them that ten represents a definite stand on the issue in a certain direction and one indicates a definite stand on the issue at the other polarity. Five means the student is undecided and so on. Ask the class to form a graduated line placing themselves in the position in the line that best demonstrates their stand on the issue.

Then ask the students on the opposite ends of the line to reveal their reasons for their particular stand. Also, ask one student in the middle of the line to explain why they choose that position. This is terrific way to enliven an evening class and get an interesting class discussion going about a controversial issue.

When students cannot keep up

Be aware that students can become distracted during your presentation for many reasons. For instance, students become bored if they cannot take notes as quickly as you give information, so pause often, tell a brief story, relate a news item, read a quote show a cartoon on an overhead — just give students a chance to catch up and take a breath.

But DO NOT ask “How are we doing?” “Does that make sense?” “Are there any questions?” Very few students will respond to such a questions. They don’t want to say anything that might suggest that they don’t understand the lecture.

Inexperienced instructors assume that the lack of response to “Are there any questions?” indicates that every student fully understands what has been discussed and is ready to move on to new material. These instructors usually are very wrong in making such an assumption and will only find this out when scoring the results of the next exam.

There are never any questions...

Instead of asking, “Are there any questions?” start some interactive learning activities. For example, select a student to share with the class the last note that he or she wrote. This will give you an idea of what is being perceived as important and an idea of at least one student’s note-taking skills. This will give you an opportunity to help students improve their note taking skills if you find they are lacking. A majority of students will attempt to take too many notes so they actually lose the benefit of your explanations.
Instructor-provided guided notes are an excellent way to correct the note-taking problem. Guided notes are essentially a sparse outline of the lecture. The main lecture headings and subheads can be provided allowing the students a small space on the handout to add a few details as necessary to personalize the learning. Since you must prepare and organize a lecture anyway before you come to class, you should be able to print guided notes for your class with a minimum of extra work.

Summarizing points is another effective method in helping students retain information and take appropriate notes. (McKeachie, 1999). Newble & Cannon (1995) also suggest not only summarizing the previous segment, but also periodically summarizing the main points of all the segments covered that session. If your students did not understand a prior concept, summarizing allows another opportunity for clarification.

Another important technique is to use key words to signal transitions between topics or important points (McKeachie, 1999). Along these lines, make sure you explain jargon. Although some experts recommend not using jargon at all, if students are studying a specific field, they do need to know the industry language to understand their future coworkers.

Therefore, instead of avoiding the use of industry-specific terminology, provide definitions. If your textbook does not include a glossary of terms or you use many terms not defined by the text, your students will certainly appreciate it if you create a glossary handout.

Researchers also suggest not only summarizing the previous segment, but also periodically summarizing the main points of all the segments covered that session. Employ a computer, flip chart or overhead to quickly summarize points as you go.

Value not apparent to students

Another reason students become disinterested is that they may believe that the topic or concept does not pertain to their everyday lives or that the concept is too abstract. To help students’ understanding, provide several examples and analogies throughout the presentation (Greive, 1995). Better yet, pause and ask them to provide examples from their own lives. However, when questioning students in any way, pause for at least eight seconds to allow them to formulate an answer for a knowledge question and 10-15 seconds to allow them to reflect on higher-order questions. You may also ask student to get out a sheet of paper and briefly write their answers and comments. That way, if you call on them, they will not truly be on the spot or unprepared if you call on them to respond.

Students don’t perceive that you care

A third reason students lose attention during a presentation is their belief that the instructor does not care about them, the subject, the career field, the institution or the value of a higher education degree.
A common student complaint is that their instructor does not talk to them, other than to give them information. Also, students are quickly disenchanted with instructors who don’t make eye contact. To personalize your lectures, use gestures, walk around the room, smile and laugh and ask students to interject or share appropriate experiences from their lives (Greive, 1995).

Above all, demonstrate your enthusiasm for the topic you teach. This dedication to your area of expertise makes you more interesting to hear and the subject matter more interesting.

Rehearsing lectures in your mind’s eye can help you develop enthusiasm. Imagine your students sitting in front or around you as you go through a preview of your upcoming lecture and the difference you can make and the increased knowledge of your subject can make in their lives.

**Ending Techniques**

Planning the conclusion is just as important as planning an attention-grabbing introduction: Students are more likely to remember your parting comments more than any other segment of the lecture (Newble & Cannon, 1995), so take advantage of it. Conclude the lecture by summarizing the main points again or have the students summarize the main points.

This is a good time to make a quick review of your notes to determine if you forgot any points that you wanted to cover. Of course, field questions, and possibly incorporate an ending classroom assessment activity to solidify concepts into their minds or to determine what they do not understand (McKeachie, 1999). Angelo & Cross (1993) have many suggestions and practical examples on incorporating these into your presentations, such as “the one-minute paper” and “the mudiest point” activities.

Finally, for problem-centered lectures, give students a few minutes to analyze information and provide a solution for the problem you gave them at the beginning of the presentation.

You should also plan a few minutes to review and discuss their answers. A final idea is to quickly highlight what you will be covering in the next class session and any assignments (including readings) that the students need to know about.

**Your turn — Review Question.** List five things you can do to prevent boredom or recapture student attention. (Print this page and the next to save your answers.

1. To recapture attention or prevent boredom I can…
What to do when things go wrong

Every presentation will not be ideal, no matter how much planning you do because of a variety of reasons, including lack of participation, time, equipment and student conduct. If students look like they are becoming bored, avoid talking faster, changing the pitch or volume of your voice, or becoming more frenzied in your gestures (Brookfield, 1995).

If the lecture is not proceeding well, simply ask your students to complete one of the one-minute learning exercises you have prepared. This will give you time to consider a new approach. In addition, if you find that you do not have enough time to complete your lecture, avoid increasing the pace of your speech. Instead, conduct a quick assessment of which segments can be skipped or saved for another time. This should be relatively easy if you created your presentation in segments.

For the student who argues the validity of your information (“But Dr. Jones says that…”), tell the student where the information was found, encourage the student to conduct some research and to determine which information is correct and why.
We are experiencing technical difficulties...

You are the ultimate educational leader in your students’ lives, so you must always be ready, willing and able to take charge and cope, even when the multimedia equipment in your classroom is not willing to cooperate.

Technical difficulties are a big distraction in presentations, and you must have an alternative plan to compensate. If you are using PowerPoint or other presentation software, print copies of the slides for yourself as a backup to use as lecture notes if necessary.

You may also want to print the frames on overhead transparencies and have crucial frames copies printed for your students. In any case, always have a hard copy of your notes. Nothing looks more unprofessional in a presentation than stumbling through the subject matter in which you are considered to be an expert because a discharged battery in your laptop makes your lecture notes inaccessible.

Special Considerations with Distance Education

In cases of distance education, technical difficulties can bring the class to a halt. If you are teaching an interactive television course or one that uses similar electronic delivery methods, you may want to fax your notes to the remote classroom, if possible. Oftentimes, someone can make copies for all your students. Another way to deal with this is to provide some kind of task to reinforce the lecture topic or have students in each site compare notes with another classmate. You may also have students take a break to stretch until communication can be reconnected.

In cases of technical malfunctions during a synchronous internet lecture, you may have students write a journal on how the lecture topic applies to them or have students use this time to type questions to be sent to the instructor. Be aware that in some cases, you may have to postpone the lecture when the server is down. It is always best to inform students as early as possible of your expectations of them in cases where technical difficulties impede class.

Playing to a tough audience

Another obstacle of a perfect presentation is the behavior of students. The three most common distractions are the student who has several clarification questions, the student who argues about the validity of your information, and the student who is misbehaving. When a student constantly interrupts to ask questions, you can choose to: answer his or her question, then continue; incorporate the question into the lecture; or invite the student to write down all the questions he or she has and offer to discuss them after class. However, if you allow one student to fracture the flow of the presentation, you risk losing the attention of the rest of the class.
Validity challenges

For the student who argues the validity of your information ("But Dr. Jones says that..."), tell the student where the information was found, encourage the student to conduct some research and to make a decision of which information is correct. Knowing how to deal with this situation is very important. When you are caught off guard, the flow of the remaining portions of the presentation is disrupted because you will tend to focus on the student's comments rather than the topic.

A misbehaving student can also disrupt flow of the presentation. To reprimand him or her without completely stopping your presentation, you can give the student a subtle gesture, a disapproving look or give the class a general reprimand ("Everyone quiet, please!"). However, if the student continues, the instructor may desire to dismiss the class, speak to the individual in private and speak to the dean and/or a security staff member.

For more information about how to handle the unruly student, read the TFS Focalite Positive Classroom Discipline by Becky Schantz, which is another Focalite in the Teaching For Success series. Go to http://teachingforsuccess.com for the latest information on all the TFS Focalites. To keep up-to-date on your teaching read the Teaching For Success monthly, faculty-training letter.

It's not easy

To feel comfortable giving lectures and to find a style that works for you and your class requires a great deal of trial and error. There's no magic formula. It takes experience and practice to build your lecture skills.
How to Activate Your Lectures

2. **Problem:** Your PowerPoint slide show won’t run. Corrective action?

3. **Problem:** Your students become sleepy 15-minutes into your lecture? Corrective action?

4. One student constantly interrupts with off-the-topic questions. Corrective action?

[Don’t forget to print this page to save your answers.]

---

**Show You Know**

**Test Your Knowledge**

(Correct responses are shown at end of this section)

1. Students often start losing attention about how long after the start of lecture?
   a. 5 — 10 minutes
   b. 10 — 20 minutes
   c. 30 — 45 minutes
   d. 45 — 60 minutes

2. When planning a lecture, what is the most important question to ask yourself?
   a. “Why are these students taking this course?”
   b. “What do I want my students to know in the chapter/reading assignment?”
   c. “What will be important for them in a year?”
   d. “What do I know about the students taking this course?”

3. **T** F: The conclusion-centered lecture is an ideal technique to use to teach your students how to solve real-world problems.

4. **T** F: Student participation should be used sparingly during lectures because the instructor will not be able to discuss all the points he or she wants to cover.
5. Which of the following is not a probable reason why students would lose interest in your presentation?
   a. They become overwhelmed with your active learning segments.
   b. The concept is too abstract for them.
   c. They cannot take notes quickly enough.
   d. They believe your refusal to maintain eye contact means you don’t care about them.

6. List five of the seven ways listed in this course to organize the content of your presentation.
   1. 
   2. 
   3. 
   4. 
   5. 

7. Because of several lengthy discussions generated by a student’s questions, you find that you will not be able to include the last section of your lecture. What should you do?
   a. Ask your students to remain after the class session officially ends for an extra five minutes.
   b. Speed up your delivery rate so that you can finish your entire lecture before the end of the class period.
   c. Make a cliff hanger out of the information in the last section and cover it at the beginning of the next class meeting.
   d. Tell your students that they will need to learn this material on their own from the textbook.

8. What visualization is useful when using the River-crossing method of lecture of organization to order topics?
   a. Stepping stones.
   b. Headers and bridges.
   c. Rocks and shores.
   d. Islands and channels.

9. Instead of asking at the end of your lecture, “Are there any questions?” What should you do?
   a. Continue lecturing to get more material in each class session.
   b. Ask each student in turn if they understand the lecture so far.
   c. Start some interactive learning activities.
   d. Administer a pop quiz.

10. You notice that your students always seem to be buried in their notebooks instead of listening to what you have to say. What should you do?
    a. Next lecture period video tape your presentation and ask a colleague to help you determine what is happening.
    b. Stop and summarize the main points of your talk.
    c. Audio tape your lecture and check for use of jargon.
    d. Prepare a set of guided notes to hand out to students at the beginning of your next lecture.
Answers

Check your answers:

1. b.
2. d.
3. F.
4. F.
5. a.
6. 1. Simple to complex.
   2. Near to far such as in a geographical framework.
   3. Past to present as in an historical perspective.
   4. Problem to solution—a problem-centered approach.
7. c.
8. a.
9. c.
10. d.

If you missed more than two questions, it would be best to review the course material before working on lecture improvement.

References


On the following pages, you will find several planning grids and a process diagram to help you activate your lectures. You are licensed to print these forms as needed for your own use.
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<tbody>
<tr>
<td>Task 1. Identify learner characteristics relevant to the material to be learned.</td>
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<tr>
<td>Task 2. Identify what you bring to the instructional table — What are your strengths? Why are you in the classroom?</td>
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<td>Task 3. Choose the optimum lecture format.</td>
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<td>Task 4. Determine the best way to organize the content.</td>
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<td>Task 5. Select or create the visuals learners will need to really understand.</td>
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### TFS Lecture Preparation Sheet — What You Need to Know to Plan an Active Lecture — Check When Task Complete or Make Notes as Applicable in the Boxes Below

<table>
<thead>
<tr>
<th>Task</th>
<th>Lecture 1</th>
<th>Lecture 2</th>
<th>Lecture 3</th>
<th>Lecture 4</th>
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<tbody>
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<td>6.</td>
<td>Structure or outline your major lecture and lesson points.</td>
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<td>7.</td>
<td>Create a short learning activity that gives students the opportunity to apply the new knowledge.</td>
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<td>8.</td>
<td>What lecture format would be optimum for this lesson?</td>
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<td>9.</td>
<td>Fill out the Active Lecture Timeline and Activity Sheet (see page 32).</td>
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<td>10.</td>
<td>Lightly rehearse your presentation and visualize what you would like to see happen during this class session.</td>
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How to Activate Your Lectures

The Nine-step Active Lecture Timeline

Add notes on how you will accomplish each step:

2. Communicate Objective/Purpose: How?
3. Connect with Previous Learning: What and how?
4. Present New Material: definitions, facts, procedures, rules, concepts, principles.
5. Refining and Guiding Learning: questions, probing, critical thinking, meta-thinking memory aids, visuals: what and how?
6. Application of Learning Exercises: List exercise, materials needed, group exercise or individual?
7. Evaluation of Application Exercises. How will you evaluate the application exercise?
8. Recommending Performance Improvements. How will you determine what improvements are needed, and how will you communicate them to individual students or groups?
9. Final Review and Cement Learning. How can you restate core of lesson and give reasons for returning to the next class?
— End of Course —

We wish you much success in your evaluation efforts!

Look for more FL titles coming soon!

Contact Information

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