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Planning a Class Session

A Guide for New Teachers

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Planning a Class Session - *Introduction*

Entering a classroom without planning is like heading cross country without a map. You can do it, but it is rarely an efficient way to travel. Daily planning is essential because it gives you a clear sense of what you are trying to accomplish and how you are going to accomplish it.

Being prepared means planning not just what you will teach, but *how*. What such a plan might look like can vary considerably. Session plans are as individual as teachers themselves. Accordingly, this guide for class planning focuses not on the *product* but on the *process* underlying effective planning. The emphasis throughout is on getting you to reflect on critical questions that underlie effective teaching, such as planning, setting goals, and assessing what you have done.

We suggest that you construct an actual session plan as you read through this guide and have provided exercises to help you do this. By the end, you should have a completed session plan you can use.

Planning a Class Session - *Getting the Big Picture*

Getting a bird's-eye-view of the terrain you are about to cover is always a helpful first step. It is also a step that will greatly aid subsequent planning activities by providing direction and minimizing time-wasting detours. Before you begin planning any of the details of your class session, it is essential that you address the following three questions:

What do your students already know?

One of the most useful things you can do before you begin thinking about specific activities for a particular class is to reflect on who your students are and what they can reasonably be expected to know and do. For example, asking for an analysis of the symbolism in *Ulysses* is probably unreasonable as a first assignment in a freshman composition course. Conversely, if you are teaching a 400-level course in statistics, it is doubtful that your students will need to review basic arithmetic.

In other words, when you plan a class session, it's a good idea to consider the levels of prior knowledge and ability that your students have demonstrated in the course. There are a number of strategies for getting this information. What you learn may surprise you, or it may not. But knowing will be an excellent starting point for your planning.

If you're teaching a particular course for the first time, take the time to talk with other faculty/TAs who have taught the course before. Alternately, you might employ a **background knowledge probe** at the start of a new unit to gather data about your students' preparation as a whole. This information can help you decide how to present the material and plan activities. For example, if the probe suggests that most of your students do not understand a concept they will need in order to understand the new material, you might want to begin the unit by presenting this concept. On the other hand, if only a few of the students lack the prerequisite knowledge, you can ask those who need extra help to visit your office hours or a learning center.

You might also consider at this point whether your students are likely to have misconceptions about the new material that will hinder their learning process. For learning to proceed smoothly, you will find it useful to address this misconception directly. Many teachers uncover these misconceptions with a **misconception/preconception check**, which is similar to the background knowledge probe, but instead of asking only about students' prior knowledge, it focuses directly on assumptions or beliefs that may actually hinder learning in the course. Instructors find this activity particularly useful in courses dealing with controversial or sensitive issues, or those in which students may have developed intuitive but inaccurate theories. Discovering and addressing these inaccuracies ahead of time will save considerable frustration later on.

A few moments reflecting on what your students know brings focus to the rest of your planning activities.

What do you want them to learn?

Not all topics and activities in a particular subject are of equal importance, nor are all chapters in the textbook of equal value. Therefore, when planning a particular class session, you need to think about what it is that you want the students to walk away with at the end of that session. Trying to cover too much is a far more common error than trying to cover too little. Be selective. Keep it simple. Resist the temptation to cram everything you know about a subject into a single class session. It probably took you far more than 50 minutes to learn what you know, and there is no reason to believe that your students will learn it any faster.

Planning a Class Session - *Getting the Big Picture*

In addition, review the previous day's class and look ahead to future class sessions. If you plan each class thinking about how it relates to other material in the course, you will begin to include these links in what you present to students. This in turn will make it easier for students to see how the new ideas and materials build on what they have already learned, and how the individual session furthers the objectives of the course.

If you can't organize all the material you want to cover under 2-3 major points or objectives per class session, go back and start pruning.

Why is it important for them to learn it?

Finally, it is useful to reflect on the decisions you have made about what to teach and to articulate your rationale. Obviously, if you can't find something compelling to say about the importance, significance, or utility of the material at hand, you can't expect your students to see the relevance either. In that case, you may want to reexamine the syllabus. Alternately, if you are teaching from a syllabus you did not create, take a moment to reflect on why today's material was included. Having a clear rationale may help motivate student learning as well. Examining and thinking about these relationships can give strength and substance to your planning and consequently to everything you do in the classroom.

Questions for Reflection

- Who usually takes this course?
- Why do they take it?
- What do they already know about the material?
- Is it a general education course or for the major?
- What are the prerequisites, if any?
- Where does the course fit into the department's curriculum?
- Is it required for another course or major?

Planning a Class Session - *Filling in the Details*

Once you have a general map for where you are going and your rationale for going there, you can begin to fill in the details of how you are going to get there and what you will take note of along the way. The precise combination of methods, examples, and sequential order in a session plan is guided by many principles, including your students, your subject matter, and the materials and classroom space available to you. How extensive and detailed your plan needs to be is largely a matter of personal choice. Again, remember that the plan is not a script; in fact, *you* are the primary audience for the plan, not your students. Let the following questions guide you reflections and planning.

What method(s) will help you accomplish your goals?

Choosing specific teaching methods that will best achieve course and session objectives is one of the most important day-to-day decisions a teacher faces. Knowing what methods are available and what objectives each method is best suited for helps teachers make this decision more easily.

Most people, when asked about teaching methods, start by identifying two main types of instruction—lecture and discussion—these, in effect, are on opposite ends of a continuum with many exciting possibilities in between. Collaborative and problem-solving approaches, for example, are two methods that fall along this continuum; they can be combined and integrated with lecture and discussion in countless creative and effective ways.

Teachers in certain disciplines often lean more heavily toward one end of the continuum or another. The question of which teaching method to use, however, is actually less an issue of discipline—or of class size—than one of purpose. A good rule of thumb is that lectures are an effective mechanism for conveying information about and enthusiasm for a field, whereas problem-solving, small group, and discussion sessions are more effective at developing new skills and changing behavior.

Because virtually all classes require both the acquisition of skills and information as well as the opportunity to apply them, you may find yourself using a combination of both formats within the same course or even within the same class period. For example, a lecture can be used to model problem-solving techniques with input from students, or it can include an interactive question-and-answer period followed by small group discussions of the new concept. Becoming more aware of teaching methods and how they might work together can make your decisions about using methods to achieve course objectives more deliberate and effective. (To learn more about the various teaching methods, read chapter 2 of *The Penn State Teacher II*.*)

Questions for Reflection

What are the teaching methods typically used in your field? Why? What about your field lends itself to those methods?

What methods aren't typically used in your field? Why? Which of these would you like to try? How would you adapt them to make them work in your course?

What examples and activities will you use?

No matter which methods you choose to employ, you will need to plan relevant examples, illustrations, and activities that demonstrate your main points. You'll want students to make connections between the new material and their prior knowledge—knowledge already learned in the course as well as from their personal experiences—so the best examples will take that prior knowledge into account. A fair amount of brainstorming may have to occur before you will find those details that will best illustrate a concept or idea for a particular group of students.

Planning a Class Session - *Filling in the Details*

This is also the time to plan what the students will be doing in class. Do students need to describe individually their understanding of a few fundamental concepts, or are they ready to tackle a challenging problem in small groups? Do they need to debate a controversial bill so as to better understand their own and others' preferences and prejudices, or are they ready to discuss more objectively the legal precedents and policy implications? Do they need to observe and respond to a controlled demonstration, or are they ready to begin designing their own related experiments? Whether taking notes, posing questions, making arguments, or planning projects, students need to be engaged at a level appropriate to their background and the session goals.

How will the examples and activities be sequenced?

You may find, as you plan, that the major points you want to make fall into a natural order—perhaps temporal or historical—that will help students master the content. There may be some kind of underlying logical structure to the examples you have chosen; for instance, perhaps you will be using a series of physical demonstrations that build on each other.

In other situations, the logical sequence of activities will reflect the natural sequence of learning in a particular discipline. In “Effective Explanations” (from *The Penn State Teacher II**), John Lowe explains how the discovery process in chemistry shapes how he plans his classes:

Some books and lecturers will start by defining groups and then proceed to give examples. However, I have found that it's easier for a student to start with a simple, concrete example and then generalize from that. ...I believe that the order in which humans make discoveries is the order in which we learn most naturally. The normal order in science is first to observe specifics and then to generalize and abstract, yet we often ask our students to begin with the abstract and then observe specifics.

Finally, don't forget to plan how you will open and close the class. The beginning of class needs to capture students' interest and show how today's class connects with what they've previously learned. Closing on an appropriate note is nearly as important as opening on one. There are many different ways you can bring the session to a logical conclusion, but even a brief summing up can greatly aid students' retention of the material and bring closure to a class.

Questions for Reflection

Think back to when you first learned the concept you are teaching for today's class.

- What do you remember most about learning the concept? Was it difficult? Frustrating? Immediately obvious?
- What prior knowledge helped you learn the new concept?
- What examples or illustrations know?

**The Penn State Teacher II* is available online at www.schreyerinstitute.psu.edu/resources.

Planning a Class Session - *Gauging Your Progress*

One last—but important—thing to consider when planning a class session is how you will get feedback about what your students have learned. In other words, how you will find out whether or not your objectives for the day have been achieved? All too often we discover on the final exam that what our students have learned is not at all what we thought we were teaching. Don't wait until then.

How will you assess student learning?

Take the time now—while you're still planning the class—to articulate your criteria for evaluating student performance. Doing so helps you make sure that your session plans focus on the knowledge and skills you expect students to demonstrate. Working from criteria when planning class sessions helps you to maintain continuity between class activities and the exams—and between session objectives and course objectives.

One good way to prepare exams is to write questions while you are teaching the material, rather than waiting until the unit is complete to create the whole exam. If you write down a few potential questions while you work on each session plan, you will approach the exam with a pool of relevant, reasonable questions to draw on. Again, this helps to make sure the exams really test students on the material that you have decided is important for accomplishing course objectives.

Even within the class session itself, you can include some simple checks for understanding to see if your students have met your stated objectives for the day. Finding out whether or not your students have learned what you set out to teach allows you to build on the class session in future sessions, and it helps you adjust your approach if you discover that the objectives are not being met.

A simple way to find out what students have learned is to ask questions. Another form of asking questions is having students apply what they learned, perhaps by solving a sample problem or maybe explaining the concept to someone else. You might, for example, present them with the kind of question that will be on the test and have them work in pairs to agree on an answer. Not only does this give you useful feedback, but it also helps the students gauge how much they really understand the material.

A more formal way to assess what students have learned is through a **minute paper**. At the end of class, ask students to write down answers these two questions: 1) *What was the most important thing you learned during this class?* and 2) *What important question remains unanswered for you?* Minute papers are usually anonymous, but when you collect them, they'll give you a good sense of whether or not what students think is important is what you thought was important.

Questions for Reflection

What are the overall goals students must reach to succeed in this course?

How can I measure achievement of those goals?

How does today's material help students work toward these goals?

Planning a Class Session - *Part 2: Exercises*

- 1. Background knowledge probe**
- 2. Misconception check**
- 3. Defining objectives**
- 4. Articulating your rationale**
- 5. Matching methods to objectives**
- 6. Examples and activities**
- 7. Sequence of activities**
- 8. Checks for understanding**
- 9. Evaluation criteria**

Planning a Class Session - *Getting the Big Picture*

Exercise #1: Background knowledge probe

Background knowledge probes are simple questionnaires that ask a few focused questions about those concepts that students will need to know to succeed in the course. Asking questions of this sort can help to highlight important concepts for the students as well as to inform the instructor about the students' knowledge and abilities.

Thinking about the topic for the session you are planning, write 2 or 3 questions that will help you gather useful information about what students already know.

Planning a Class Session - *Getting the Big Picture*

Exercise #2: Misconception check

Sometimes the question is not what students know or don't know, but rather what they think they know. In any discipline, students are likely to begin a class with some incorrect assumptions about the subject and the field.

To prepare this kind of activity, begin by asking yourself the following questions:

- What misconceptions about the course material may be common?
- Which of these are most likely to interfere directly with learning?
- How deeply rooted will these misconceptions be?
- How can I deal with these misconceptions once they are identified?
- What will be the stumbling blocks to student master of the material?

Planning a Class Session - *Filling in the Details*

Exercise #5: Matching methods to objectives

For each of the 2-3 points you plan to make in this class session, decide which method will be most effective for facilitating student learning.

As you plan, consider the following questions:

1. Given what you hope to accomplish, which method is best suited to your current objectives?
2. How easily is this approach implemented with the size of group that you have?
3. Are there any physical obstacles in the classroom that might impede implementation of your plan?
4. Will you need more than one approach to accomplish your goals? How skillful are you with each of these approaches?

Planning a Class Session - *Filling in the Details*

Exercise #6: Examples and activities

Look at the concepts you want students to learn in this class and decide which activities and examples will best help them learn. Consider the following questions:

1. How does this material fit into the course as a whole? What important connections will need to be made?
2. What activities or illustrations might help them make those connections more easily?
3. Can you think of any examples or activities that draw directly on your students' previous experiences?
4. What will students need to do to demonstrate their understanding of the material?

Planning a Class Session - *Filling in the Details*

Exercise #7: Examples and activities

Looking back over the content, methods, and activities you have decided on in the previous exercises, arrange them into the most logical order.

1. Do the major points you want to make fall into any kind of natural order?
2. Will temporal or historical order help students master the content?
3. Is there some kind of underlying logical structure that you can use?
4. How can you convey that structure to your students?

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