

The Miniature Guide to
Practical Ways for Promoting
**ACTIVE AND
COOPERATIVE
LEARNING**

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27 Practical Ways To Improve Instruction

Introduction

Although bringing critical thinking into the classroom ultimately requires serious, long-term development, you don't need to sweat and slave to begin to make important changes in your teaching. Many simple, straightforward, yet powerful strategies can be implemented immediately. Below we offer a sampling of such suggestions. They are powerful and useful, because each is a way to get students actively engaged in thinking about what they are trying to learn. Each represents a shift of responsibility for learning from the teacher to the student. These strategies suggest ways to get your students to do the hard work of learning.

Many strategies enable you to take advantage of what students already know and what they are able to figure out for themselves. Many involve students' working together. All too often students get stuck, or don't understand what they are supposed to do. Several students working together can correct each other's misunderstandings and can make much more progress on tasks. When one student gets stuck, another might have just the right idea to move things along. This enables students to become responsible for more of their own learning. Over time, they begin to adopt the strategies they see their peers use successfully and learn to ask themselves critical questions raised by their peers.

Another advantage of the following suggestions is their wide applicability. Most can be fruitfully applied to any subject, any topic. Most can become standard practice — techniques you continually use. For some of these strategies, we provide examples geared to different content they might be used to teach.

At the heart of our approach is a realistic conception of what it takes for someone to learn something. In a sense, much instruction is unrealistic: "If I say it clearly, they should get it. If they give the right answer, they know it and understand it. If I show them what to do, ask them to do it, and they repeat

my performance, they have learned the skill and it is their's whenever they need it. If I tell them why something is true or is important and they nod their heads and repeat it back, they understand the truth or importance of what I have said."

This is not necessarily so. Often students' failure to do well, to apply what they have covered, to remember in the Fall what they learned the previous Spring, results from the above naïve misconceptions about what learning requires. Above all, learning requires thinking — critical thinking. To learn, one must continually ask, "What does this really mean? How do we know? If it is true, what else would be true?" At the heart of our approach is the conviction that, ultimately, learners must answer these questions for themselves in order to learn, to know, to truly understand. Answers you provide do not entirely sink in unless students' minds are ready to take them in.

The following suggestions, or "teaching tactics," provide ways to begin this process of enabling students to think their way through the material they are expected to learn, to learn how to use what they learn, and use the power of their own minds to "figure things out."

1) During Lectures Ask the Class Questions to Arouse Curiosity.

If students want to know a fact — either because their curiosity has been aroused or because it will be of use in their daily living — they will be motivated to learn it. If the questions asked in class are of a probing nature, they will also lead to a deeper understanding.

2) Use Study Questions.

These can be created for every assignment, lecture, and audio-visual presentation. Students are motivated to quiz themselves, and each other, on these questions because exams are based completely on them. The study questions should require some active thinking, not mere memorization. Some of them should test for the ability to understand, explain, illustrate, and apply the concepts and principles being taught. For instance, in a lesson on human anatomy, before

Another tactic we advocate fosters careful listening. Arrange students in pairs. Then ask a controversial question. The students then share their opinions with their partners and justify their positions. Their partners listen carefully and then repeat back what was said — but in their own words. The first speakers then point out any misunderstandings of the views they had expressed.

10) Speak Less so That Students Think More.

Try not to lecture more than 20% of total class time. Break off your lecture every ten minutes and have students talk to each other in pairs or threes, where they will retell the key points made, and then apply, assess, or explore the implications of the material.

When you are the one doing most of the talking, you are the one doing most of the thinking. As you explain what you know, you may have to express yourself differently, think of new examples, and make new connections. If you can get your students to do more of the talking, they will be thinking through the material and developing a deeper understanding. As one teacher put it “Next year my students will be taking my class; I’ve been taking it for 18 years.”

People’s minds drift in and out of long speeches, and so they miss much of what is said. Breaking up long lectures gives students a chance to be more active — and also assimilate and think about what they’ve heard. Smaller bits are easier to mentally digest than large hunks. And, by pooling their perceptions, students can sometimes correct each others’ misunderstandings before they become deeply ingrained. Having them report on what they discussed helps the teacher correct their misunderstandings.

11) Be a Model.

Think aloud in front of your students. Let them hear you puzzling your way slowly through problems in the subject. Try to think aloud at the level of the students in the class. If your thinking is too advanced or proceeds too quickly, they will not be able to understand and assimilate it.

actually being able to use them. To recognize when these criteria are met and when they are not, and be able to re-work something to bring it closer to high standards is something that requires considerable practice. Students don't gain these abilities by reciting abstract principles. Teaching students how to assess their own work is one of the most important things you can do to get them to improve the quality of their work.

27) Teach for Usefulness.

Teach concepts, as far as possible, in the context of their use as functional tools for the solution of real problems and the analysis of significant issues. We learn what we value knowing. When students are simply told that what they learn is valuable, but don't actually experience that value and power, they tend to disbelieve, or not truly believe, that there is any point to what they learn.

We should continually demonstrate the value of what we are teaching. No amount of abstract argument will engender the deep, sincere conviction that knowledge is valuable. Such a conviction requires the experience of actually using it. If students begin with an interesting question or problem, and find they can make much more progress on it when they have the insights and skills which a lesson provides, they will gain a greater appreciation of the material in that lesson.

By "taking in" material without applying it to significant issues, students do not learn how to apply what they learn. The best way to solve the problem of transfer is to not create it in the first place. Transfer is impeded when teachers divorce learning from application or postpone fruitful application indefinitely.

Summary

These tactics, and others like them, are useful in generating greater student involvement in the subject matter. They promote active listening and get more individuals to participate in classroom discussions. Students also learn how to summarize the views of others. When students express and justify their own opinions and yet learn to respond empathetically to the ideas of others, they