

Using The Blackboard:
A Low-Tech Approach to Successful Learning

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This approach is one that I like to use whenever my class is small enough and there is enough blackboard space.

I believe that students learn when they have a positive attitude, and this positive attitude comes from being successful. The main goals of my approach are

- (1) to actively involve the students (no spectators), and
- (2) to make sure that they are successful in class.

It is cooperative, supportive, and provides a positive atmosphere. In my experience, each of the following points is crucial.

1. Everybody goes to the board at the same time.

If there isn't enough room, send half of the class to the board.

2. Everybody works on the same problem at the same time.

This makes it possible to interrupt the students in the middle of working on a problem, and give some hints about how to finish it. That way the students understand that they need some new knowledge, and they apply it immediately. After doing several problems this way, you can put up a list and let students go ahead and work at their own speed.

3. Students work in groups of two or three.

The students in the group must take turns writing on the board (to make sure that there are no spectators), but it is perfectly all right for one student to tell another exactly what to write.

4. Each problem is checked before it is erased.

It is important to have contact with each group that is working on the board.

DON'T let students copy down a solution. That means they don't want to deal with the problem now, but postpone understanding it till later.

DO use problems from the solutions manual, so that you can just tell students to go look up the solution later, if they need to.

DO emphasize cooperation. Some of the best students might be bored. Ask them to explain to others, since it will be obvious that you don't have enough time for everybody. Say that teaching others is the best way to learn.

DON'T worry about the chaos—this approach allows students to be active and talk to each other, but you must keep them on task.

DO put up a list of problems that the best students can finish. Let them leave a bit early—then you can work with those who really need it.

If you try this approach, I believe that you will find it successful. Of course, you may need to modify it to suit your own style.