COMPILATION: Board meetings speed up the class pace!

In May 2001 David Hestenes posted that there are many ways that a modeling teacher can speed up the class pace. David said, "One very important way developed by my graduate student Dwain Desbien is called a Board Meeting: All the students gather into a circle where everyone can see all the white boards. The teacher stands outside the circle and only occasionally interjects while the students discuss and compare results. When skillfully done, this is faster and more effective than Socratic questioning."

Below are posts from modelers, in response to David Hestenes' comments.

------------------------------
Date:    Sat, 5 May 2001
From:    stan hutto <fizwiz2@YAHOO.COM>
    I tried the board meeting method after it was posted last fall and it does speed up the review of lab/worksheet problems - and I did not notice any drop-off in retention or understanding. So I must assume that sometimes we "beat a dead horse" in the Socratic dialogue and we continue using a lengthy protracted process too far into the year. Next year I will use the lengthier process only for the first two units and then will begin to compact the WB sessions.
    Once again my basic mantra is that "Just doin' whiteboards ain't modeling!" It's the interactive dialogue that you have the students constantly engage in where they must explain and use the "models" in their questioning/explanations as you interact during class/lab.
----------------------------
Date:    Sun, 6 May 2001
From:    Laura Sloma <lsloma@LUCKEY.NET>
    I have started using a combination of traditional whiteboarding and board meetings. I have had some feedback from some (usually slower) students saying that they learn more from the traditional way. They feel they sometimes miss something when they are trying to look at all the whiteboards and follow a discussion at the same time. What are some characteristics of a "skillfully done" board meeting?
--------------------------------------
Date:    Mon, 7 May 2001
From:    Eric Brewe (ebrewe@campus.hpu.edu after Aug. 2002)
Laura,
    I have been teaching along with Dwain Desbien and Mike Politano, University Physics at ASU. We have been developing our approach to modeling for a few years now. During that time, we have recognized a variety of things about being certain to cover an appropriate amount during the semester.
    There are two facets to speeding up a class; the first is related to how the board meetings are run. Dr. Hestenes suggested that a person skilled at running a board meeting will be quicker. I agree, the specific skills that are needed are to be able to determine when students are floundering without a clue, when they are discussing and headed towards a resolution, and when they are just wasting time. The skill here is to learn to guide them in the direction of resolution, without imposing your knowledge on them, so learning to ask appropriate questions at appropriate times is critical.
    The other facet that is important is to allow work you did at the beginning to pay off in the end. For example we spend a long time on kinematics, and much of the time is spent getting students used to the tools that we will be using throughout the year. We do kinematics with vectors and as a result when it is time to move on and do force diagrams, we know they already know how to add vectors, so we can concentrate on the concepts involved with force, instead of the practicalities of adding vectors. Furthermore, by the time we get to momentum, we say they are vectors and blow right through it. So time spent at the beginning is often well spent at the end.
    These are the things that I think allow us to cover as much if not more during a semester, than a traditional lecture class.
Jane asked me to share with you a little bit about my experience with circle whiteboarding, "board meetings". After talking with Dwain Desbien and seeing a video of him using this technique in his college classes, I became interested. Last year I had some success in classes and failure in others. In some classes, I could rely on the students to really get into the discussions. I rarely had to interject. Usually only to bring out some point that I want to work the kids toward in a lab. Occasionally I will seed students with some questions to draw something out in discussion. Other classes just sat there with waiting for me to give them the answer or not interested in sharing or asking questions. Frustrating!

I talked with Dwain and he suggested that I start with board meetings from the very beginning of class. This would begin setting up a community of learners from day one. So, I had a board meeting on the first day of class. I have students hypothesize how a given device works. Each group writes up a white board, then we had our meeting to discuss the ideas. The first day went great! Students in all classes shared, questioned and discussed. I had to seed questions once in a while but things were very good. That set up a very good board meeting later in the week to discuss the results of the Circle Lab, too. Our Assistant Superintendent stopped into my class during our first board meeting and was impressed with the students' participation and involvement on the first day of school!

From the very beginning, we set the expectation for discussions in board meetings, so the students don't know any other way. I have been very pleased with what my students are pulling out of lab results from our board meetings. The dialog among the students has been great to hear. Students are really starting to think about the things that graphs represent. Thanks to Dwain for the tips on running a board meeting.

A side bonus: When we move into a board meeting we have to move lab tables out of the way and move the chairs into a circle in the center of the room. This creates about 60 seconds of noise heard in the neighboring classrooms. Those teachers have been curious about what is going on and are asking questions about the circle board meetings and how they can use the technique in their classrooms. Very exciting.