

## Setting Teachers Up for Success: A Reflection on Providing Professional Development



It's December 1. I sat down at my computer to find an email from our district's science coordinator with the subject "Chemistry teachers request."

*Oh, great, I thought to myself. More work:*

The chemistry teachers on the curriculum development team were interested in learning more about some of the instructional strategies you use in the classroom. In particular, they mentioned wanting to learn more about the board meeting. I was wondering if you would be willing to share out these practices with other science teachers?

I won't lie—I was flattered. If you want me to do something, playing to my ego is a good strategy. Board meetings were something that I had been working really hard on improving in my classroom, and I was glad to hear that people had noticed.

Essentially, a "board meeting" (an instructional strategy from the [American Modeling Teachers Association](#)) is an opportunity for students to write their data, observations, and/or results from a lab experiment onto a whiteboard. The

class then circles up to discuss what they see on the boards and use it to answer a question and further their understanding of a phenomenon. When the meeting goes well, I've found that this strategy can lead to fruitful, authentic science discourse, so I wanted to share it with the district.

Also, I wanted to get some praise, and I knew that my students could make this look good.

## Much like the situation with my students in their stoichiometry unit, I had (in a sense) set the teachers in my district up for failure.

So I volunteered to lead a short professional development session in February, and I cherry-picked a lot of what I considered to be good moments to share on video to create buy-in. It worked; I hooked my audience. They witnessed my students discussing the evidence from their lab, making connections between the class data, and assessing the validity of the data. All of the teachers said they would love to see their students engaging in these scientific practices. Once I had their attention, they tried participating in a board meeting themselves and were also quite successful! Everyone left for lunch on the professional development day feeling good. Teachers felt they had a new strategy. I felt that I had positively affected science teaching on a larger scale.

Two days later, the lead teacher on the chemistry curriculum team sent me an email:

Just wanted to thank you again for your presentation to the chemistry teachers of your Board Meetings. I learned a lot and have gotten lots of positive feedback from several people about it. There's strong interest in

making our Fall CLE a Board Meeting. I wonder if you would like to be involved also in the work the team is doing to help us make that happen successfully.

The CLE (or Common Learning Experience) is a district-mandated short series of lessons and assessment that all chemistry classes across the district experience, and now they wanted to use a strategy I presented! I also heard from our science coordinator that she put together an edited version of the video footage from my classroom to be shown at an upcoming district board meeting. I was starting to feel a little like a super teacher.

It was in this moment, though, that my internal feeling of satisfaction began to turn to horror. Despite being in an inquiry group this year with the working title “How not to lead like an asshole,” I began to realize that I had done exactly that.

I came to this realization by considering what was happening in my classroom and with my students. This was just about the time I was teaching stoichiometry, and I had shifted to a new way of presenting the material. While I really liked the shift, I (like most teachers going through something the first time) realized that I hadn't done a great job preparing the students to be successful on the assessment. They weren't set up to succeed because I used a new strategy without fully considering all the necessary supports and time that would need to be implemented for it to work.

And that's when it hit me—I had done the same thing to those teachers at the February training. They were shown a (good) new tool, but were not given time to really think through the implications. And now it was set to be district-mandated! I realized there was a lot that I did not do for the teachers in the district:

What teachers did and reflected on:

Watch a video of a great board meeting.

Experience the logistics with a group of highly motivated, skilled educators.

What teachers didn't do or reflect on:

The fact that board meetings have been my own personal inquiry for 2.5 years.

The terrible whiteboards students will create the first time and the strategies I use to improve whiteboarding skills.

The framing that goes into the first board meeting, including the fact that I met with English/history teachers to get common language around Socratic seminars.

The first board meeting, which is always terribly awkward, and that, despite explicit instructions, students will simply present their boards and then stare at you waiting for guidance.

The many iterations of “grading” and student reflection I have tried to improve the board meetings.

The second board meeting is still not that great. For some classes, the third or fourth might not be great. This means more reflection and adjustments. Even “good” board meetings have a lot of room for improvement, as many students can disengage.

This all takes loads of instructional time that I have decided is worth it (but I admit is likely not worth it in all contexts).

These meetings can go in totally different directions than you planned for. I’m a flexible person, but not every teacher is going to be comfortable with this.

Much like the situation with my students in their stoichiometry unit, I had (in a sense) set the teachers in my district up for failure. I didn’t want teachers to run to their classrooms and try this strategy, then discover it looked nothing like the video I showed. They might blame me, or themselves, or (even worse) the students. I realized I needed to re-think how I might engage teachers in training. I was given that opportunity just a few weeks later when I received another email:

We are wondering if one of you (even a pair or triad) would like to work together to host a portion of the Summer Institute specifically for science teachers on Day 2 of the institute and act as general support to science teachers throughout the three days. This seems particularly timely with onset of NGSS [Next Generation Science Standards] and the looming science test; as well as moving the work forward from the past few years.

I offered to run a session that would tackle the broad term “NGSS assessments.” This time, I made some key changes to my approach:

1. I had a co-planner to talk through the ideas with me. She had run many successful professional development sessions and was great at giving advice about realistic timing and outcomes.

2. I didn't presume to know "what's best." In the first professional development I'd led, I had shown what I thought (and honestly still think) to be a "best practice." My mistake was assuming that it would be a "best practice" in all contexts. For the NGSS section, I provided assessment items that were labeled as "NGSS" and some that weren't. I did not present them as something perfect, something to strive for, or even something that was good at all, but instead as something that the teachers should evaluate.
  
3. I had teachers create a product that made sense for them. I asked teachers to (start) work on an assessment that they could use during the school year, and allowed them to use all, some, or none of the materials provided. After all, they know their students and teaching styles best; who am I to tell them what to put on the test?

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# through how these ideas might actually play out in their classroom.

As the June training came to a close, I found that the response to my session from the participants was remarkably similar to that in February: largely positive. The difference was in the reason for feeling positive. Although teachers did not leave with a “new tool,” they did comment that the session felt useful. This was at first surprising, as during the session teachers had literally said the assessment we were looking at was “terrible.” But on further reflection, teachers had actually been given the time to really process the work they were given and arrived at (the important!) conclusion that the resource was, well, bad.

As I continued to reflect, I felt that the session was useful to teachers because I had made two assumptions: (1) teachers, like students, need time to process new ideas and (2) teachers know their context best and have the professional acumen to decide how best to use (or not use) the resources they are given. Teachers like professional development trainings where they are given cool, new ideas—but teachers love professional development where they are given the opportunity to think through how these ideas might actually play out in their classroom and are given the autonomy to decide whether it will work in their context.

As I continue to work formally and informally with my colleagues, I hope to remember that we are all eager learners who need the right level of support to succeed. Whether planning for a 10th grade chemistry lesson, or a district-wide training, it is crucial to consider what the students need, not what might make the presenter look best. I still have a way to go in my own development, but this experience has given me the insight I needed so that, in the future, I can support my colleagues in more productive ways.

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