**JANET CONRAD:** So in 8.13, the way that we assess student learning, one of the ways that we assess student learning is for them to give talks that are the kind of talk that you would give at the American Physical Society meeting. It's a little bit different. We give them three extra minutes than what you would have in the American Physical Society meeting. Nevertheless, it's very hard to squeeze everything you've learned into a 15 minute talk.

And what we're looking for in the talks, we're looking for several things. We're looking for how well they understand the content. And how will they communicate the content, both visually and also verbally. And so those are the three things that we're really trying to hit on as we grade them related to the talk.

So the students will end up giving four talks. The first talk is on the early set of experiments that they have. So they do three short experiments, just to learn a lot about how the equipment works, how statistics works, things along those lines. And they choose one of those to give a talk. And that talk doesn't count. So it's an opportunity to find out what it is like to give a talk and to find out how I'm going to be responding, the kind of questions that I'm going to ask at the end, and how we're going to go back through everything and take it all apart and see if we can put it back together.

Then they have three long labs that they have done. And one of those three long labs will be the subject of their final talk that they give at our mini conference. And so, in the three talks that they give, what we're doing is we are not just checking all of the information that they've learned to make sure that they understand all of the physics and so forth. We're also helping them rethink those talks so that they can then give an even better talk at the mini conference. And so I'm doing that. I always do this with my TA. So there's two of us in the room. And the lab partners are together in the room.

One person gives the 15 minute talk. And then as we go back through, the other lab partner writes down all of the comments that we have. So that the other lab partner can give the first one, the one that was giving the talk, all of our information. So that they can make the changes.

And so this seems to work really well. And they will also work very closely with Atissa, our communications person. And she also goes through the talks with them. We videotape them.

So she can see the videotape and then she can go through the videotape with the students. And that really helps to make the mini conference talk really good also.