JANET RANKIN: The beach ball strategy is a way to get students who might not want to answer questions or be a little less outgoing in their answering of questions to answer questions. So there's a few different ways to use the beach ball, actually. And one is you just pose a question that has enough variation in the types of responses. So you wouldn't say OK, what's 2 plus 2 as an example for the beach ball question. You would have to have something that was a little bit richer.

> And then you throw the ball at one student or up into the lecture hall, if it's a big lecture hall. And whoever catches it has to respond. And that response, you share it with the group, comment on it if you want to comment on it. And then that person who gave the first response throws the ball to somebody else. And then whoever catches the ball that time responds, et cetera.

> You can use it coupled with a picture prompt or a graph. So if you show a graph or an image and you say, tell me something you observe about this image, and then you throw the ball and the person catches it first says one thing they observe, and they throw it and the next person says something that they observed about the picture prompt. So that gives a foundation and it opens up space for lots of responses.

> The beach ball does a few things. One is that as the instructor, you don't have to be the one that calls on the students all the time, so the students don't feel like you're picking on them, that you're the one that's cold calling on them. And in fact you can throw on the beach ball completely blind the first time, close your eyes, throw the ball, and so nobody really feels that you've called on them. And then subsequently, it's other students that are throwing the ball, so there's no issue that you're the one that's picking on the students.

The other thing is it's kind of fun, you're throwing the ball around, so it's hard to get upset, it's hard to get as a student nervous that you're going to have to answer the question. And in fact, you could dodge the ball if you really didn't want to answer the question. So it's a great way to get students talking. And in general, it's pretty fun.

And at first I thought oh, I can't really use this with grad students, it's too goofy, it's too baby or silly. But actually, every time I use it with grad students, postdocs, everybody seems perfectly fine with it. I think it's more to do with the nature of the question. If you just ask stupid

questions and throw the ball around, it'll be stupid. But if you ask good questions and it's a way for students to give you their answers, then it seems to work totally fine.

That's the general way. Sometimes I'll actually write questions on the beach ball and then throw the ball into the class. And then students are loosely supposed to answer the question that's in front of them when they catch the ball. So that's another way to do it. But it's a nice, inexpensive, fairly flexible technique.