Activity: “Science Fair” Poster Presentations

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**Created for:** Bio 93

**Activity Type**
Student presentations  
Small group model building / poster creation

**Time Needed in Discussion:** 45 minutes

**Purpose**
- To allow students to work together as a team  
- To give students an opportunity to teach and learn the concepts in class from their peers  
- To illustrate, diagram, and effectively communicate the big themes from lecture  
- To allow students to ask each other questions and explain major concepts

**Abstract**

<table>
<thead>
<tr>
<th>Pre-class prep</th>
<th>5 min</th>
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<tbody>
<tr>
<td>Overseeing the activity</td>
<td>45 min</td>
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**Supplies**
- Pad of large easel paper  
- Colored markers  
- Class notes and textbook  
- Masking tape

**Pre-class prep**
- Gather supplies  
- Write out themes from class on strips of paper later to be distributed to each group. (For instance, a theme can be “mitosis”, “Mendel’s law of segregation”, “DNA transcription”, etc)

**In Class**
1. Divide the students into small groups of 3-4 (up to 5 if necessary) and give each group a strip of paper that has the topic/concept that they will illustrate. It’s fine to give 2-3 groups one topic – better to repeat a current, complex topic than use easy or old topics. Hand out a piece of easel/flip chart paper to each group. (3 min).

2. Explain the instructions: “Today we’ll be doing a group activity in which you and your group members will illustrate, diagram, draw, and explain the topic that you were given. You’ll have 20 minutes to work on this poster with your group. When you’re working on this, I want...
you to think about how you would best communicate this information to your classmates because after the 20 minutes, you will explain your concept to the other groups and in turn, they will explain their concept to you, using these posters. Be creative, clear, and concise.”

3. Move the desks aside so students can work on the counter space, the floor, or on the board with their group members. Walk around and monitor the students’ work and ask them about how they’re going to use their poster to explain the concepts. Tell the students periodically how much time they have left so they don’t slack. (20 min).

   As groups finish and start to look bored, have them tape their posters to the wall around the room. Direct them so that posters on the same topics end up on different walls. You can also ask who did the drawing and designing of each poster, and then elect one of the quieter or lesser-used students to be the main presenter of the poster. You may want to elect two in the group to present so they can discuss how best to go over the information.

   Try to move desks inward so students can move along the edges and look at the posters.

4. When all groups have taped up their posters, each group will explain their concept to another group for about 5 minutes and the other group will do the same. At this time, the classroom will be chaotic from people moving about (20 min). See “alternative presentation” at the end if you don’t think your students have the energy and interest to choose their own posters to visit.

5. Collect the posters at the end.

**Things to Ask or Emphasize**

- As you’re going around to each group, ask how they plan on presenting the information so that others can understand what they’re trying to convey.
- Guide them on how best to present their topic.
- Each group will have a different topic so you should emphasize different things for each group.

**Comments**

The students really seem to get involved in this activity. It gives them a chance to be creative and think about the best way to explain a concept to others. When they are presenting their concepts to each other, the students are good listeners and many of them have questions for their presenters. It’s a low stress situation because the students are explaining the concepts to each other so they feel less self-conscious or intimidated.
Alternative Presentation:
If your discussion needs a little more guidance (or you like a little more control), you can run the activity like this:

1. Choose 3-5 complex topics from recent lectures. Assign 2-3 groups to each topic.
2. Each group should have an artist, an organizer, and 1-2 presenters. The organizer and artist will do most of the setup of the poster, while the presenters will talk about how to explain the poster.
3. At presentation time, tape the posters up on the wall around the classroom. Each wall should have different topics on it. Presenters for the first topic should each go stand by their posters.
4. Remaining students should get out their lecture notes, and stand up, pushing all the chairs to the middle of the room.
5. Students should choose the closest presenter to stand next to. Each poster should have 5-10 “audience” members.
6. The presenters should explain their poster to their "audience," and answer questions. The discussion leader should be nearby and keeping an eye on the explanations. "Audience" members should ask questions as they feel the need. The "audience" can take notes during the presentation.
7. After the first topic is covered, the presenters for the next topic present and the "audience" groups refer to these notes while listening to the presentations and asking questions.

The benefits to having everyone standing:
1. Nobody gets as sleepy listening to the presentations
2. It's more like an actual science fair