

# LTRP: Preparing Research Presentations

Days 37, 38, 39

## OVERVIEW

During these two lessons, students create visual aids to use during their oral scientific presentations. At the beginning of the lesson, students watch an example presentation on data from Wigglin' Worms (Days 13, 14) and discuss the differences between written and oral presentations. Overheads for this presentation are provided in Appendix C: Worm Presentation. The example presentation can be used to demonstrate presentation styles, incorporation of background materials and/or formatting of visual aids. Students use the rest of the time to outline their group presentations and prepare overhead transparencies to guide the audience. The process pushes students to review their experiences and to determine the most important points of their research project. They must summarize these experiences and ideas with only a few written words on the visual aids. Students can use lots of words to explain an idea when they speak but the words on the visual aids should be simple. Visual aids can also include maps, graphs, and drawings – some can be copied from the poster and other will need to be drawn for the first time.

**Focus Question:** *How do you prepare clear and simple visual aids for oral presentations? What kind of language is best for explaining scientific research orally?*

## SCIENCE SKILLS

- ✓ Students will be able to outline their entire research process.
- ✓ Students will be able to state the most important aspects of their research.
- ✓ Students will be able to create clear visual aids.
- ✓ Students will be able to script a clear and concise scientific presentation.

## BACKGROUND

Background information describing the concepts in this lesson is presented in the following sections:

Section I: Research Q&H – *Four Parts of a Scientific Presentation*

Section IV: Presentations – *Oral Presentations*

## MATERIALS

- ✓ overhead transparencies (about 8 per LTRP group)
- ✓ permanent markers
- ✓ index cards
- ✓ access to a copy machine
- ✓ overheads from Appendix C: Worm Presentation photocopied onto transparencies
- ✓ student worksheet (provided)



**LTRP**

## DEVELOPMENT OF LESSON

1. Start by discussing the celebration. All the students should already know that the celebration is coming but they may not have thought about their own presentation yet.
2. Give the example presentation on worm data to the class. Afterward, discuss the difference between a poster presentation and an oral presentation. How many words were on each overhead? How large were the words? How was the presentation organized? What was fun about it? What was boring?
3. Read the handout together as a class. Solicit suggestions for interesting things to include on the visual aids for each section. For example, students who studied bugs could include pictures or sketches of the main bugs they found. Remind the students that they are not starting from scratch again; all the ideas that they need are in their scientific notebooks. Is there information from the field report form that they would like to include in the methods or the discussion section? Are there interesting facts from their first library research trip that might make the introduction more exciting?
4. Remind students that they only have room for “word-clues” on their overheads. Word-clues are just a few words that remind the speaker what he or she needs to say and that help the audience follow along. For example, the introduction overheads do not need to contain full sentences but rather a bullet list of one- or two-word phrases that help the audience follow what is being said. As students create these overheads, they can script what they will actually say on index cards.
5. Review the difference between written and oral language. A reader can go back and reread a confusing sentence but a listener cannot go back and replay it. Oral sentences must be simpler and shorter than written sentences. All scientific words need to be defined.
6. For the remainder of the class, students work in their LTRP groups to create a series of overheads and a script for their presentation. The first step is to decide who will be in charge of each section and to identify a list of all the overheads that need to be created.
7. When the teacher has approved the presentation organization, students can begin working on their overheads. They can use the handout as a guide, checking off each box as they complete it. Some groups will need only 4 overheads, others will require many. It works best if students draft the overheads on blank paper. The teacher can check for font size and clarity before students begin working on the actual transparencies. The drafts can easily be traced onto the transparencies. When students are writing directly on the overhead transparencies, it may be best to use permanent markers so that the overheads don't smudge as they are



handled or as details are added. Some groups may want to trace items from their poster. Groups may also print out words and graphs from the computer for the teacher to photocopy onto overheads. Students should not use whole paragraphs or even long sentences from their poster but rather bulleted lists. They can be printed in large font but the teacher may have to further enlarge the text while copying.

8. As students work on their visual aids, they can script their spoken language onto index cards. It may help students feel comfortable including only word-clues on their overheads if they can write out the whole sentence that goes with it. Some students may not need to script their parts but others may find it a very important confidence-building tool.
9. Groups who finish early can begin practicing their presentations.

### **DISCUSSION QUESTIONS**

1. What are the differences between a great presentation, an adequate presentation, and a weak presentation?
2. How do visual aids improve a presentation? How can visual aids detract from a presentation?
3. What kinds of visual aids are fun? What kind of visual aids help you understand the material? Think about the visual aids your teacher uses.
4. How is written language different from oral language?
5. What techniques help keep an audience's attention? Humor, intonation, loud voices, picture, enthusiasm.
6. What kinds of questions might someone ask about your project?
7. Which scientific words will the audience be familiar with? With which will they be unfamiliar?