

## #5 Intervention Design and Final Report

### Purpose

For the students to integrate all the knowledge from the AMBIENT Air Module by creating a presentation recommending a particular course of action to address the asthma problem in their school.

### Overview

This is the culminating experience of the AMBIENT Air Module. Students work in teams to develop an intervention based on their specific research findings and to present that information to an audience of decision-makers and adults from outside the classroom. This experience will require the students to synthesize their varied knowledge of the air quality and asthma issue, organize this knowledge, and present it persuasively to their "employers."

### Time

3-5 two-hour block class periods with team homework in between; the first session is to start the students, the second is to evaluate their progress, and the third is for them to present their debate/role-play. This experience should involve time in and out of the classroom to collect, organize, and create the Final Report.

### Key Concepts

Thorough research is always the first step toward finding solutions.

A powerful presentation is a brief synopsis of relevant points leading toward the proposed action.

Each member of the team has a role to play in making the Final Report.

### Skills

Working in teams

Writing effectively

Editing written material

Fulfilling a written contract

Public speaking

Crafting audio-visual presentation materials

Answering audience questions

### Materials

Computer access to presentation software such as PowerPoint would be useful, but not essential since transparencies could be used to illustrate the speaking points. Although software (such as Microsoft Word or PowerPoint) would facilitate the creation a mock intervention brochure or poster, these could be done purely on hard copy incorporating pictures and text. Creation of a video would require video camera equipment.

A transparency projector or slide or LCD projector for presentation of transparencies, slides or computerized PowerPoint presentation.

### Facilitator Preparation

You will need to help the students decide how to organize themselves to fulfill each part of the written contract. Will students remain in their research groups and take the four parts of the contract separately, or will they work as a whole class to develop an

intervention plan? Now having worked in teams, can the students assign themselves roles based on their strengths?

Time is of the essence for the presentation. The total presentation including questions cannot exceed 30 minutes, so the presentation must be well edited for content (i.e. no repetition of points) and focus. The students chosen to be the speakers should practice the whole presentation at least once with a timer.

Teachers should organize a receptive audience for the Final Report, including any experts interviewed by the students, administration officials, the school nurse, and interested parents.

## Background

Students will have generated a lot of knowledge on air quality by this point in the process. The challenge for them in this section is to make decisions about what should be done and to present their knowledge in a clear and factual way to people assumed to be unfamiliar with the topic.

## Procedure

Organize an **Intervention Planning Session**, in which the whole class brainstorms possible approaches by the school to address the asthma problem in a proactive and responsible manner.

Possible Intervention Plans include:

- ◆ An Asthma Awareness Campaign designed to reduce stigma and increase diagnosis and treatment of student asthma. Such a campaign might include posters, radio spots, or speakers in health classes.
- ◆ The adoption of a well-known asthma education program designed by the American Lung Association or other group.
- ◆ Improved screening and education of students at risk of acute asthma such as student athletes.

The critical point for the students is to let their research inform their choice of intervention. What makes this intervention uniquely appropriate for their school? They will be arguing this point in their Final Report.

The discussion should also involve the following topics:

- ◆ What can the school do to reduce the exposure of students to pollutants in the school environment?
- ◆ Can the school take action in the community to improve students' air?
- ◆ What difficulties will the School Board face in taking action on this issue?
- ◆ Will parents and students be supportive of the intervention?
- ◆ Will the intervention be expensive?
- ◆ Will the intervention be a one-time only effort or an ongoing one?
- ◆ Where else in the school district beside the students' school might the School Board want to focus asthma prevention efforts?
- ◆ Are there existing programs at the local or national level, which could address your school's problem?

**Further Investigation**

Students can implement all or part of the recommended intervention with the help of school officials.

Student can also get involved at the local or national level to support actions that lead to cleaner air. A letter-writing class session to local and national politicians may be a natural follow-up to the module.

**Student Assessment**

Give the following presentation design components to each student team as a guide to their group presentations:

- ◆ Decide what facts are important to include in support of the recommended intervention.
- ◆ Design a handout that summarizes this information and their point of view (i.e. brochure, video, WebPages, rap/song, poem, play, poster)
- ◆ Practice and keep their presentation within the time allotted
- ◆ Each group member should take part in the presentation, even if it is just to read or explain one piece of the presentation.
- ◆ Several different team members should answer at least one question from the audience at the end of the final presentation.

Assign points for the following components of the Final Report:

- ◆ Were the handout and presentation easy to read/effective at communicating the facts and the recommendations?
- ◆ Were pictures/tables/illustrations used?
- ◆ Were proper science terms used?
- ◆ Was each group member actively involved in the presentation?
- ◆ Did the group report their sources?