Figure 3. Concept map for the Indoor Air Quality Curriculum

INDOOR AIR QUALITY CONCEPT MAP

1) DEFINE THE PROBLEM:

What are the environmental health problems that need to be addressed at Hydroville Middle School?

(Activity 1: Welcome to Hydroville)

2) COLLECT DATA AND DEVELOP HYPOTHESIS(ES):

A video, interviews, building walkthrough, and building model provide observations and data to begin the investigation.

(Activities 2 & 3 and Team Meeting #1)

Building Engineer

What building modifications need to be made to improve the indoor air quality?

(Activities 4 & 5 and Team Meeting #2)

Occupational Physician

What are the possible IAQ hazards that are causing the health problems?

(Activities 6 & 7 and Team Meeting #3)

3) COLLECT AND ANALYZE DATA TO TEST HYPOTHESES

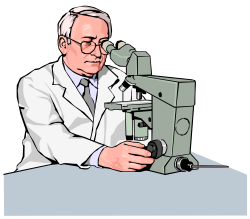
Environmental Solutions, Inc.

Team of experts hired to investigate the indoor air quality problem.

Industrial Hygienist

What are the possible sources of chemical hazards?

(Activities 8 & 9 and Team Meeting #4)



Mycologist

What are the possible sources of biological hazards?

(Activity 10 and Team Meeting #5)

4) SYNTHESIZE DATA AND GENERATE SOLUTIONS:

Teams synthesize their findings and develop an action plan to improve air quality in Hydroville Middle School.

(Activity 11 and Team Meeting #6)

5) PRESENT SOLUTIONS:

Teams present evidence for the causes of the indoor air problems and an action plan to the Hydroville School Board.

(Activity 12)