

**Excerpts from the
Web Conference Summary
How to Involve Students in Your IAQ Program**

May 12, 2005

Shelley Harding and Shannon Stookey-Flahavin from East Valley School District in Spokane, Washington, are both actively involved with a student group called the Air Quality Controllers, who EPA honored with a Special Achievement Award in December 2004.

Shelley Harding

Shelley Harding is the Director of Student Achievement for East Valley School District. For her presentation, she shared how one group of students has made a positive difference in their school district. Indoor air quality impacts the physical health of many students, as well as teachers and staff who assist them in the learning. It also affects the ability of students to learn and adults to teach them, so the journey to attain and maintain healthy indoor air quality is important.

District Superintendent, Dr. Michael Jones, first heard about the *Indoor Air Quality Tools for Schools (IAQ TfS)* Program through the American Association of School Administrators (AASA) who was offering grants to implement the *IAQ TfS* Program. Dr. Jones applied for and received a grant from AASA to implement the *IAQ TfS* Program. As a participant in this grant project he was motivated to ensure student achievement was not adversely impacted by poor IAQ in the schools. He also wanted to engage students in the work to inform them of IAQ and its potential impacts. He wanted to involve students so they could educate others in the district about no- and low-cost ways to improve air quality in schools.

The East Valley School District was fortunate to be at low risk for poor IAQ. The staff wanted students to be involved in helping to identify proactive steps to maintain good air quality. Ms. Harding believes that making the connection between and among students and staff was best accomplished with students as the leaders. Students have a unique voice and a strong interest in a healthy environment.

As the project administrator, Ms. Harding wanted students to identify low- and no-cost ways to improve air quality in the district. She recruited Ms. Stookey-Flahavin to support the project at East Valley Middle School. She worked with the students to use checklists and set up the project design. Students consulted with district staff and local IAQ experts to learn about IAQ and maintenance practices. They conducted an experiment with two vacuums to test the efficiency with which each picked up dust. The students reported their results to maintenance and custodial staff and earned credibility with the maintenance staff. The students were provided with a radon test kit to set up at schools in support of the district's radon testing activities.

Using information they collected from checklists, the students wrote an IAQ manual, which included results from the tests they conducted, a previous audit of the buildings, and their no- or low-cost suggestions for ensuring good air quality in the schools. They presented this information to Ms. Harding and the school's board of directors. Through their work on this project, the students and staff realized that networking is crucial to the survival of any worthwhile project.

Part of the AASA grant provided a stipend for Ms. Stookey-Flahavin, since she spent time after school hours to help students with their research and report preparation. The students' manual was duplicated, prepared in binder format, and provided to each school site so it could be updated periodically with data from new audits. With part of the grant money, the district purchased backpack vacuums. These new vacuums are more efficient than the previously used models.

In the fall of 2004, students and their teachers met with and presented the IAQ manual to principals, custodial representatives, student leadership groups, and representatives from each school site's safety committee. These meetings provided a forum for communicating the importance of good IAQ and encouraging participation from students. Each student in the group earned high school science lab credit as a benefit of participating in the project.

Ms. Harding noted that one barrier to any change is a lack of consensus among stakeholder groups. To create consensus among students and staff, the student group shared information on certain factors that affect health in school buildings and suggested changes that would help to create a cleaner and safer indoor environment. These suggestions include removing dusty couches, dusting more frequently, and not spraying perfume and hair spray in the hallways.

In closing, Ms. Harding noted that the student group was presented with a Special Achievement Award at the 2004 *IAQ TfS* Symposium. The spokesperson for the student group, now a sophomore at East Valley High School, shared part of his story that clearly communicated the value of student participation and ownership in IAQ work.

"I have seen first hand the rippling effect it has when a young person encourages participation and good habits concerning indoor air quality. When I told my mom about my project she was interested to learn what I had learned. Over the next few days she came back from work with questions and comments from other people she had talked to about my project. It was amazing. I had sparked interest in my community. It may seem strange to you to see a young person sincerely pursue a technical, typically adult, boring issue, but who better to get involved than the youth. We have creative potential; it only has to be inspired."

Shannon Stookey-Flahavin

Shannon Stookey-Flahavin, 7th grade Science and Math teacher at East Valley Middle School, is working with a new group of 28 students for the next phase of the project. This project is funded by a grant from the Washington State Department of Health and the Centers for Disease Control and Prevention to address the issues of asthma and IAQ. East Valley School District is one of three districts in the state who received a grant. Participating students, from two middle schools in the district, have committed to providing 40 hours each to the project. The group has one facilitator, as well as a teacher advisor at each school.

As part of the grant-funded project, East Valley is using a computerized absenteeism system that records the reason for each student absence. They are also creating a survey to assess symptoms affecting asthma. The system is also being used to record health room visits, reasons for each visit to the health room, the classroom from which each student is coming, and symptoms. Students are also collecting and storing data on temperature, humidity, carbon monoxide, carbon dioxide, and air particulates from four schools.

The participating students received training on IAQ and are collecting data with \$12,000 worth of IAQ monitoring equipment purchased by the district. Students collected data for two weeks

then organized the data. Many guest speakers have visited the group to provide more information about IAQ. These speakers have been impressed with the students' ability and interest to learn about the issue. In addition, school staff have been incredibly impressed with the students' ability to learn about IAQ and their adeptness handling technical IAQ equipment.

Students have also conducted research on IAQ, asthma, and symptoms caused by a building with poor IAQ. They have created a presentation about asthma and IAQ. This student group has met with the first student group to ask questions and learn more about their experiences. They have conducted walkthroughs using the Kit and will present their findings to the school board before the end of the school year.

In closing, Ms. Stookey-Flahavin noted that the data are not yet final. At the time of the Web conference, students had been collecting data for two weeks. They are compiling a cumulative report and organizing the data for the report so it can be useful and easy to access in the future. East Valley School District continues to have great success with involving students in the IAQ project.