

## Cancer research project impressed students at Saint Ambrose



The Saint Ambrose sixth grade class had a rare opportunity to do cancer research. (Photo courtesy of Saint Ambrose School)



By 'Sam' Boyer/special to cleveland.com on September 26, 2016 at 11:35 AM, updated September 26, 2016 at 11:36 AM



BRUNSWICK, Ohio – When sixth grade students at Saint Ambrose School arrived at their science class on Sept. 21, they were excited to learn they were going to be cancer research scientists for the day.

They were informed they were going to receive lung cancer tissue sample imagery and they were required to research and use computer programming to determine which form of lung cancer they were investigating.

The students collaborated in groups to research the various forms of lung cancer using a code library. They coded using sensing to collect data in lists. After they completed those tasks they were able to determine if their tissue samples were small cell or non small cell lung cancer.

Students also learned about cancer research careers and how to be a cancer research scientist through tissue sample investigation, research, data collection and analysis. A special guest was Jennifer Seidel, from Solutions Behavioral Health. She presented statistics, a video demonstration and lung cancer props that included lungs, teeth and phlegm that had been exposed to smoking.

"I was impressed by the Saint Ambrose sixth grade students," Seidel said. They were very knowledgeable about the two different lung cancer cells covered in the presentations, along with the symptoms and effects of smoking."

The STEM project was possible through the collaboration of science teacher Laurie Hamzik and computer science teacher, Lori Schlueter. Hamzik recently taught the students about cell division and how cells may transform into cancer. Schlueter was able to use that background knowledge and implement it using her coding by focusing on lung cancer cells. English language arts teacher, Melissa

## Coding with Lung Cancer

<p><b>PROJECT DESCRIPTION</b></p>	<p>Recognized by <a href="http://www.cleveland.com">www.cleveland.com</a> for this collaborative STEM project. Guests from Solutions Behavioral Health brought in specimens and models of lungs exposed to smoking. Students coded with imagery analysis to collect data to determine which form of lung cancer cell they were investigating. The ELA teacher had students write about their reflection on the project.</p>
<p><b>INPUTS</b></p>	<p>Computer science class, Solutions Behavioral Health guests &amp; specimens, ELA class</p>

<b>OUTCOMES</b>	Students were able to code to collect data that determined which form of lung cancer they were investigating in a group. Students also conducted online research and discussed results at the end of class. Students also filled out special project exit slips.
<b>LEARNING IMPACTS</b>	Students were impacted by this project because of the class, guests, and specimens. Students discussed this class with family and friends, warning them against smoking. Through this STEM investigation, it impacted students to lead healthier lifestyles. Students reported that they had interest in STEM fields.
<b>PROJECT LINKS</b>	<a href="http://www.cleveland.com/brunswick/index.ssf/2016/09/cancer_research_project_impres.html">http://www.cleveland.com/brunswick/index.ssf/2016/09/cancer_research_project_impres.html</a>