

Jan Stauber Grant Program
Final Summary
Monroe Country Day School

Description of Project

Monroe Country Day School (MCDS) did a year-long, multi-pronged project in which students read two Sherlock Holmes stories, received instruction in forensic science concepts and scientific skills (observation, problem-solving, etc.), and applied what they learned to crime scene analysis. The project was an integration of language arts and STEM objectives.

First, students read *The Adventure of Dancing Men* and *The Adventure of the Empty House*. The instructor taught these stories as a language arts unit for grades 6 through 9. The students completed standard literary analysis studying character development and plot.

Next, the science teacher led the forensic side of the project. She involved school, community and parent volunteers, and non-profits to instruct and lead the students in activities. She taught a lesson in scientific method, DNA analysis, and critical thinking.

The local Director of On Stage taught several classes on unique characteristics about forensic science crime dramas including determining clues by looking at the scene. For example, students learned how to determine if the perpetrator was right handed or left handed by doing mock fighting and stabbing.

A community volunteer taught a class and led a field trip in geocaching, an outdoor activity, in which participants use a mobile device and other navigational techniques to hide and seek containers, at specific locations. Containers were hidden in Monroe. Students used GPS coordinates and critical thinking skills to find the containers and lead them to the next container and clues.

A crime scene was created at a local historic building located in Monroe, Georgia. The students had the opportunity to solve a fictional crime while utilizing the techniques they were taught and the techniques Holmes employed such as: deduction, observation, and reasoning.

The crime scene offender left bite marks at the crime scene. Students learned how to make molds of teeth using “candy peanuts”. Everyone investigating did a mold and students used these in determining whose teeth matched the teeth marks at the scene. Students also interviewed persons of interest, asked witnesses questions and took notes to analyze all hints to solve the crime.

A reward was offered for the solving of the crime. All students received a treat for solving the crime and the first to solve the crime got a round of applause from their fellow participants when announced.

Achieved Goals

The goals of Monroe Country Day School's Sherlock Holmes project was to introduce students in grades 6th through 9th to the beloved character of Sherlock Holmes, to the intricate writing style of Sir Arthur Conan Doyle, and to apply forensic concepts in solving a crime scene. The students met the following goals. Students:

1. Read two Sherlock Holmes short stories;
2. Explored how forensic science is used in criminal investigations;
3. Applied the principles of forensic science to a fictional crime;
4. Used the scientific method to solve a case;
5. Developed organizational skills by collecting and sorting evidence;
6. Expanded speaking skills by interviewing witnesses and suspects; and
7. Worked as a team to solve the case.

Impact

This project not only impacted the students but also the teachers and the school. Our teachers noticed that this was a fun way to engage students to read for information. By presenting students with practical activities within an environment of real-world authenticity, students had a deep and long-lasting learning experience. An incidental example is; the English teacher was called to get the name of the second story students read. She said she would have to check her lesson plans from October. In turn, I called a student and she quickly responded "the Adventure of the Empty House." Some past studies have shown that adrenalin plays a role in memory, therefore, what is learned in an exciting project stays with a student longer.

The results in student engagement motivated our teachers and school to incorporate more authentic learning into our classes and school. Community volunteers experienced how important it is to share your knowledge and experience with students.

Request for Funds

We humbly request a reimbursement of \$430.00. The check can be made out to Monroe Country Day School. Thank you for this opportunity.



















