



# Teaching Grade 10 Science Using an Inquiry Approach

## Summary

Our project focussed on the development of inquiry-based activities for the new Grade 10 Science curriculum. The goals of our project were threefold:

1. to research educational literature on the benefits and implementation of inquiry-based learning,
2. to develop two inquiry-based activities, and
3. to develop effective assessment and evaluation strategies for each activity.

Specifically, the first activity focuses on the new chemistry unit. In this activity, students are trained to be part of a CSI team to investigate an unknown sample found at a crime scene. The knowledge and inquiry skills developed throughout the unit are used as part of their CSI training. Once they have graduated, they will apply these skills to solve for the unknown sample at the crime scene.

The second project takes the inquiry process to a higher level. For this activity, students are invited to an 'Exploring Light Learning Conference' where they will be experts on one of the expectations for the Light and Geometric Optics Unit. As experts they will be responsible for researching, creating a handout, teaching, and developing an accompanying lab for their topic.

Provided with each activity is a rationale for inquiry-based learning, background material, the specific activity with accompanying worksheets, and rubrics for assessment and evaluation.