

TxCETP Course Component: Understanding Scientific Inquiry

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Inquiry C: *The Raven*

Objective: Students read initial scientific observations from actual case studies and develop their own investigative strategies for each case study. Appropriate case studies are used as introductions to various topics throughout the course and the procedure for this activity may be used at that time.

Time Frame for Activity: 20-30 minute introduction for related topics throughout the course

Materials: A copy of *Ravens in Winter* and summary with instructions. (See Appendix of Resources)

Procedure:

1. Students return to their heterogeneous teams OR may work individually.
2. Case study is distributed and read during class.
3. Students design an investigation to solve the problem presented in the case study.
4. Students compare their designs to those used in the case study.

Note: Using class time for reading this first case study and designing an investigation allows for discussion of the case study itself and clarification of the assignment. Future case studies could be distributed and assigned to be read outside of class and followed up with an investigation also written outside of class. The first case study selected should be one that would introduce a topic which normally follows discussion of the scientific method in the course.

Formative Assessment:

1. What was the most difficult part of writing your investigation for this case study?
2. How was your investigative design different from the case study's author?