

Brad Horton
Cedar Rapids Kennedy High School
Geology of Iowa for Teachers – Summer 2011

Geology Project implemented in a Biology classroom

- a. **Description:** My project is developed for use within a Biology class. The project is centered around fossil collections from the Devonian. I also really enjoyed being able to cut fossils and rock as well, such as stromatoporoids, coral, and iron rock. I would like to have this worked into the project to raise interest levels.
- b. **Objective/Goals:** These fossils will be used for students to study the past history of Iowa. What kind of environment did these organisms require? Of course the obvious answer will be that they were aquatic, but the fossils offer clues to determine what kind of aquatic environment, and even can lead to discussion of plate tectonics.
- c. **Implementation:** During the evolution unit of Biology, students will look through the collection and describe the conditions required for these organisms. They will then need to explain how the Earth has changed over time since this period. Finally, students will have to write a paragraph about how biology is influenced geology.
- d. **Evaluation:** I don't plan on having this as a big unit that requires a test. Rather it will be a part of our earth history within the larger evolution unit. Students will be assessed on their overall understanding of evolutionary processes, and they will be specifically evaluated on making a connection that geology does have biological significance.

I will make the cutting and polishing of fossils and rock optional, however I think it is a great way to create interest in the samples.