

Analyzing An Ecosystem Field Trip

Summary

This is a field trip activity, our school has wetlands nearby, any other distinct ecosystem would suffice. Students will gather quantitative and qualitative data to describe this ecosystem.

Time Frame

4 class periods of 60 minutes each

Group Size

Small Groups

Materials

- CBL units
- temperature probes
- ph paper
- field guides
- pond water
- test tabs
- dissolved oxygen
- ammonia
- computers

Student Prior Knowledge

Students should understand biotic, abiotic, relationships between living things, the difference between quantitative and qualitative data.

Instructional Procedures

Hook:

Have a picture of the wetlands on the overhead. Tell students they will be taking a series of field trips to research a hypothesis.

Indicate that we will be collecting both quantitative and qualitative data for the biotic and abiotic factors of this ecosystem

Ask the students to brainstorm at their tables a hypothesis they wish to test. Ex. If water is in the stream, then it will have more microorganisms.

Have student write hypothesis on the overhead or whiteboard.

Talk about sample size (it will be small so our results will not be extremely meaningful)

Divide students into groups and have them brainstorm how they will collect their data. Make sure they know what equipment will be available to them for their use. They should write down their procedures and show them to you.

Collect data 3 times at the .

Have groups prepare their data for the class and present data. You may want to have them make computer generated graphs and tables

Have students summarize data findings individually

They should write a brief conclusion for this lab.

Assessment Plan

Scoring Guide:

Students were on task in their groups.....10 pts
Students collected complete and accurate data sets 3 times....30 pts
Students presented data clearly.....15 pts
Student had good understanding of what the data meant.....15 pts
Results were summarized concisely.....15 pts
Conclusions were pertinent to the lab.....20 pts

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)