Field Studies From the Classroom

This strategy allows students to study the environment from the safety of the classroom. Follow these ten steps.

1. **CHOOSE** a window which has an interesting and/or panoramic view.
2. **LOOK AT** and identify the general features and aspects of the physical and human environment, for example, hills, trees, fields, industrial areas, roads, and houses.
3. **SELECT** particular features which seem significant and which attract interest for further study.
4. **DISCUSS** and **ASK QUESTIONS** about the elements which have been identified.
5. **RECORD** the view through the window by a **PHOTOGRAPH OR SKETCH** or both for further study.
6. **EXPLORE** answers for some of the questions and inquire about some of the issues raised in the initial viewing by making a field visit to the selected places.
7. **INVESTIGATE** further by supplementing the field work with research in reference books, websites, and libraries. What environmental issues exist in this window-view?
8. **PREPARE** annotations for the photograph or field sketch of the window-view, making comments and explaining features as appropriate.
9. **PRESENT** the geography and associated environmental issues by adding the annotations either directly on the picture or sketch map or around the frame of the view.
10. **DISPLAY** the finished piece of work. Invite others to view and ask questions about it.

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1 Adapted from materials prepared by the Geographical Association, United Kingdom, 1998
## Field Studies From the Classroom: Cross Curricular Connections

<table>
<thead>
<tr>
<th>Ten Steps</th>
<th>Promoting Literacy</th>
<th>Promoting Math Skills</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Choose a window</strong></td>
<td>• Share ideas about which window should be looked through</td>
<td>• What shape is the window?</td>
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<td>• Express opinions about and give reasons for the final choice</td>
<td>• What 2D and 3D shapes can you see through the window?</td>
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<td></td>
<td>• Speak clearly</td>
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<td><strong>2. Look at and identify general features</strong></td>
<td>• Explore speaking and listening skills by describing what can be observed</td>
<td>• Develop mathematical language and communications, e.g., Is the house bigger than the garage? Can you see a triangle in the view? What kind of triangle is it?</td>
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<td>• Prepare a written description or report, using and extending geography vocabulary</td>
<td>• Use diagrams and charts to sort and classify a set of key features using criteria related to their size, shape, and height.</td>
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<td>• Use a dictionary when appropriate to check the correct spelling of the key features identified</td>
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<td><strong>3. Select features for further inquiry</strong></td>
<td>• Discuss and list the possibilities of further lines of investigation</td>
<td>• In the buildings you see how common are triangles?</td>
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<td>• Sort, select, and reject ideas from your list</td>
<td>• If you can see cars, what is the most common color of car?</td>
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<td>• Recal and represent key points made in the discussion</td>
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<td><strong>4. Discuss and ask questions</strong></td>
<td>• Pose pertinent questions about the topics to be investigated</td>
<td>• Plan a strategy to pursue your inquiry, e.g., when and how are we going to collect the data?</td>
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<td>• Identify a plan of action</td>
<td>• Display collected data in tables or graphs and seek answers to questions</td>
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<td>• Write letters to key people who could help with the investigations using legible handwriting or word processing skills</td>
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| 5. Record by photograph or sketch | • Describe the procedure of using a camera List the steps needed to consider when taking a photograph  
• OR describe the procedure of making a sketch  
• Identify key features and label the photo/sketch | • From the illustrations describe shapes and patterns  
• Count and classify the types of items observed  
• Make models using this information |
| --- | --- | --- |
| 6. Explore further by making a field visit | • Plan a field visit and list the required equipment  
• Observe and collect a range of evidence, succinct notes and annotated sketches  
• Interview key people in the field | • Measure specific features  
• Access and collect data though a purposeful fieldwork inquiry such as measuring angles and areas |
| 7. Investigate further in the classroom | • Write an account of the trip to the fieldwork location; write explanations to describe what was discovered  
• Read and select information in CD-ROMS, books, and documents  
• Investigate any current environmental issues and explore different points of view | • Use a variety of computer software to explore data  
• Understand relationships between numbers and develop methods of computation to solve related problems |
| 8. Prepare annotations | • Make and use appropriate captions for key features. Use dictionaries to check spelling  
• Respond through poetry to an unusual aspect of the view  
• Plan, draft, and revise work for presentation | • Prepare graphs and diagrams to display and interpret results  
• Discuss the results of your graphs and diagrams |
| 9. Present the geography | • Think about features of layout and presentation in order to represent information effectively  
• Express opinions about likes and dislikes of what can be observed through the window | • Encourage students to search for a variety of patterns in their results  
• Devise different ways of displaying them |
|--------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 10. Display finished work | • Write a diary to explain the sequence of steps taken to complete the project from beginning to end  
• Present the presentation  
• Look at, read, and enjoy the completed display | • Choose the most appropriate forms of mathematical presentation to demonstrate conclusions around a copy of the view |
Field Studies From the Classroom: Field Sketching

Field sketching is a major data recording technique. Sketching part of the landscape or a feature will:

- Encourage close observation
- Produce a detailed site record
- Enable the observer to select and emphasize details
- Provide a summary of what has been observed

HOW TO FIELD SKETCH

1. Decide on the boundaries of the scene to be sketched.
2. Sketch in the horizon and other key lines of the landscape.
3. Fill in the details, a section at a time.
4. Add concise labels or notes.
5. Title, date, and locate the sketch. Note the directions on the sketch map and the time of day.

TEACHING STRATEGIES

Provide students with a pre-drawn sketch. Their task is to observe, to add detail and labels.

Provide students with opportunities to practice skills in the classroom:
- Demonstrate the technique by projecting a photograph onto a black or whiteboard and sketch out key lines and add labels
- Provide students with photographs and ask them to develop sketches
- Introduce students to the use of viewing frames to provide boundaries for the sketch.
Field Studies: Landscape Observation

Overview
This activity, adapted from the book Fieldwork in the Geography Curriculum (http://www.ncge.org), is an effective beginning step for training students to be keen observers of the environment. This is one way to structure an outdoor field experience in a relatively open area where students can see in all directions, such as an open field or top of a hill. Before this activity, review with students the difference between human and physical characteristics. Human characteristics include what people do to earn a living, the houses they live in, settlement patterns, beliefs and ideas, languages, recreation and leisure activities, ethnicity, age distribution and so on. Physical characteristics include landforms, natural resources, vegetation, climate, soil types, bodies of water, and animals. During this activity students will observe and record both physical and human characteristics while facing the different cardinal directions of the field study site.

Grade Level
This activity is designed for students in grades K-5 but would work well with adaptation with older students.

Texas Essential Knowledge and Skills
Kindergarten: 4. Understand the concept of location
Grade 1: 4. Understand the relative location of places
Grade 2: 5. Use simple geographic tools; and 6. Understand the locations and characteristics of places and regions
Grade 3: 4. How humans adapt to variations in the physical environment; and 5. Understand the concepts of location, distance, and direction on maps and globes
Grades 4 and 5: Use geographic tools to collect, analyze, and interpret data

Materials
Large compass arrows for all cardinal directions
Clipboards
Blank paper
8”x10” cardboard frames for viewing the landscape. These can also be made with coat hangers pulled into a viewing square.
Procedures

Grades K-2
1. Make large compass arrows for each child in your class. Mark 1/4th of them North, 1/4th of them South, 1/4th of them East, and 1/4th of them West.
2. Review with the class the difference between human and physical characteristics. Tell them that they will be geo-explorers and make observations (look at) the place you are going as a place and field study site.
3. Choose a location that is in the middle of the field study site. Pass out the arrows to the students. With the aid of a compass, have the group with the North arrows stand in a line and face North. After they are in a line, have students put their arrows on the ground facing North. The rest of the class should sit in front of them and face the same direction. The students that are facing North are to tell the teacher everything that they observe (i.e., type of buildings, signs, plants, animals, transportation routes, water features, building materials, people, etc.). The teacher is to record everything that the students in turn tell him or her. The students that are seated are asked to remain silent and just observe. After the North group is finished, the other students can name things that were not mentioned.
4. Next, have the students with East arrows stand in a line and face East. Repeat the same process as listed above. Do the same for South and West.
5. After this is complete, engage the class in a discussion about what they learned about this place. On a large piece of chart paper, record their answers. Guide them with questions. The questions you ask will depend on the type of area they are observing. In a park, for example, you might use these questions:
   • Do many people use this place? What have you observed that helps you answer this question?
   • What do you see that helps people get to this place?
   • Do you think this place is pretty? Why or why not?
   • What have you seen that people have placed here? What was not put here by people?
   • Do you see anything that shows that this place has changed or is changing?
   • Is this place like other places? How is it different?

Grades 3-5
1. Review with the class the difference between human and physical characteristics. Tell them that in the field they will work in teams of two using their powers of observation to study the physical and human characteristics of the field study site.
2. Divide the class into teams of two. Pass out a clipboard with two pieces of sketch paper attached, and 8"x10" cardboard frame, and a pencil to each team of two students.
3. Choose a location that is in the middle of the field study site. With the aid of a compass, locate North. Have 1/4th of the class face North, 1/4th face West, 1/4th face South, and 1/4th face East. Students will sit in that location and take two minutes to observe only what is directly in front of their eyes before drawing. At the end of two minutes the teacher will instruct the class to start sketching only what is directly in front of their eyes, taking in as much detail as possible. Make sure that they make a note in the top right hand corner the direction they are facing while they sketch. One student will hold a frame approximately two feet in front of the student that is making the sketch.
NOTE: The frame helps focus the students; without it the eyes tend to wander around a large area. The student holding the frame is not to give verbal prompts to the student sketching. Encourage students to write the colors that they see down on their sketch. Give them a minimum of ten minutes to work on this sketch. After approximately ten minutes have passed have the students exchange places and the other student will sketch. Alternatively, allow students to work in pairs.

4. After this is complete, engage the class in a discussion about what they learned about this place. On a large piece of chart paper record their answers. Guide them with the following questions:
   • How have people changed the landscape here?
   • What do you think the physical land was like before it was changed by humans?
   • What kind of building material is used? Why?
   • What signs of transportation do you see?
   • Are there any indications of how people make their living?
   • Are there any signs of different cultures?
   • Are there any plants? If so, what do you think determined their being in this place?
   • Do animals other than humans use this place? If so, how do they get the things they need to live?
   • Do you see any indications that this place is changing or has changed over time?
   • Why do you think people would like or not like this place?
   • What conclusions can you draw from this experience?
   •

5. When you return to class, divide the class into two parts—the group that sketched first and the group that sketched second. Remind the class which directions in the classroom are North, South, East, and West. Have each group arrange themselves and their pictures in the right order to represent a picture in the round of the field study site. If wall space is available, have students tape their sketches to the appropriate wall in the correct order. This will generate discussion about how we all see things differently.

Extensions for Higher Grade Levels:
Older students in urban or rural landscapes can complete this activity. In addition to observing and analyzing what they see, they can speculate on future changes in the landscape or look for correlations between models studied in class and the patterns they observe in the field.