

Lesson Plans: The Pacific and El Niño

Objective

The objective is to illustrate and reinforce information with regard to changes in wind patterns during El Niño years by comparison with normal years and the role that plays in generating climate change.

Materials

Each group of students will need the following:

- 2 maps of the Pacific region
- Markers and pens
- Paper
- Scissors
- Resource material on wind direction/information from the Meteorological Service

Important Points to Understand

One of the distinguishing factors of El Niño is the dramatic change and shift in wind patterns. For example, during El Niño, the easterly winds significantly weakens, and in consequence, changes occur in sea surface temperature and rainfall for large area of the Pacific region.

Procedure

1. Place the two large world maps on the wall, side by side and within easy reach of the students.
2. Lead students in brief discussion of wind direction, what part it plays in climate regulation and change, and how it differs during a normal year versus an El Niño year. The local Meteorological Service might help.
3. Divide students into work groups to map out the wind patterns during normal and El Niño years on small Pacific maps and discuss how it would look on the map.
4. Once students have completed rough drafts of wind maps, ask them to describe in writing the consequences of the wind patterns in so far as climate is concerned at the bottom of their individual maps.
5. Follow up with a brief discussion reinforcing these information, or ask groups to provide a brief oral description of what is shown on the map of the El Niño event and what an El Niño means for the Pacific region.