

# SIM Model Lesson Plan: Cooperative Learning

**Teacher:** Ms. Samantha Fulin

**Date:** November 13, 2007

**Grade:** 4

**Allotted Time:** 50 minutes

**Lesson Title:** "Pollution Teams"

## Lesson Overview

In this third lesson of the "Save the Environment" unit, students will work in cooperative groups to explore about pollution, through the "Jigsaw" method of the Social Interaction Model. Students have already been involved in a direct instruction and inquiry lesson, so they are ready to participate cooperatively in teams.

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## Standards

National Learning Standards

### **ENGLISH LANGAUAGE ARTS**

#### **NL.ENG.K-12.3- Communication Strategies**

- Wide range of strategies as they write and use different writing process

New York State Learning Standards

#### **English Language Arts:**

- *Standard 1:* Students will read, write, listen, and speak for information and understanding.

As listeners and readers, students will collect data, facts, and ideas; discover relationships, concepts, and generalizations; and use knowledge generated from oral, written, and electronically produced texts. As speakers and writers, they will use oral and written language to acquire, interpret, apply, and transmit information.

- *Standard 4:* Students will read, write, listen, and speak for social interaction. Students will use oral and written language for effective social communication with a wide variety of people. As readers and listeners, they will use the social

communications of others to enrich their understanding of people and their views.

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## **Academic Goal**

Fourth grade students will develop a deeper understanding about pollution.

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## **Social Goal**

Students will understand the importance of working cooperatively within an assigned group to enhance social skills while learning about the concept of pollution.

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## **Performance Objectives**

\_Given the role-team leader, time keeper, task checker or teamwork checker, the student will discuss with their group the material that should be recorded in their "Pollution Affects My World" graphic organizer, in fifteen minutes.

\_Given the graphic organizer titled, "Pollution Affects My World" and the topic 'types of pollution', 'location of pollution', 'affects of pollution', 'causes of pollution', 'how to prevent pollution' or 'who is affected by pollution' the student will determine which information they should use in their graphic organizer, providing at least five facts.

\_Given a review group consisting of 6 group members, the student will compare notes with the rest of their group members, filling out each part of the "Pollution Affects My World" graphic organizer completely.

\_Given the worksheet, 'Pollution in My Community', the student will choose a pollution type from their graphic organizer and argue about how that particular pollution affects their community, in at least one paragraph.

\_Given the homework assignment to make a list of recommendations, the student will recommend ways that they can prevent pollution from occurring, using each pollution written in their graphic organizer.

\_Given a group evaluation rubric based on social skills, the student will rate each group member's participation and team effort, completely filling out each part of the rubric.

\_Given a self-evaluation rubric based on social skills, the student will evaluate their group participation and team effort, completely filling out each part of the rubric.

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## **Materials**

- Graphic Organizer on pollution titled "Pollution Affects My World"

- Four different color folders consisting of research material and directions for assignment
- Handouts and articles to assist group members in filling out their graphic organizers
- List of assigned group roles based on ability for teacher's assistance
- Self-Evaluation Rubric
- Group-Evaluation Rubric
- Direction Sheet
- Questions to review material at the end of the lesson

Technology

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## ***Lesson Implementation***

### **Anticipatory Set**

To start the lesson, the teacher will write the acronym "TEAM" on the overhead projector. Tell the students that today's lesson requires teamwork in order to reach their goal, and ask them to respond to what they think each letter of the acronym should stand for. Begin with the letter 'T' and ask students to raise their hands to give their responses. Student responses may include "Together we solve a problem" or "Think as a group". Continue on to the letter 'E' and again, ask students to raise their hands to respond to what they think the letter 'E' stands for. Responses may include "Everyone works together" or "Each member has a role". Make sure to collectively write the students' responses on the overhead and when complete, have the class read the acronym for 'TEAM' aloud.

The completed acronym should look something like this:

**T**ogether we solve a problem

**E**veryone works together

**A**lways listen to others opinions

**M**ake sure to work as a group

"Teamwork is very important when trying to solve a problem. You will work in groups to become experts on both teamwork and pollution by creating a graphic organizer."

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## Objective and Purpose

The objective of this lesson is for you to become accustomed to working with others in order to solve a problem, or to reach a goal. You will have to work with others in order to succeed not only individually, but as a whole group.

It is important to learn how to work together cooperatively in a group, so that you had a chance to gain social skills. You will learn how to work as a team and to depend on one another, which is an important attribute to have because in the future you will be placed in situations where you must rely on yourself and others to solve a problem.

“Now that you know the importance of cooperative learning and working as a team, you will work in groups and use social skills to complete a graphic organizer on pollution entitled, ‘Pollution Affects Our World’”.

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## Development

### Social Interaction Model-Jigsaw Method

Proceed with the lesson by announcing which students belong to each group. Read off of the “Group Roles” list, which is categorized by **student ability**. As you read off the names of the student’s in each group, give them a card, whether it’s blue, green, yellow, purple, orange or red.

Broadcast for each student holding a blue card to join into one group. Ask those holding a green card to form another group. Tell those students who are holding a yellow card to join together into a third group and for those with a purple card to join into another group. Ask those students with an orange card to group together and for those with a red card to form the last group. There will be **6 different groups made up of 4 group members**.

After students are in their designated groups, announce that they will work together as a team, in order to fill out their assigned part of their graphic organizer. Pass out color coded folders based on the color of each group. Each group will only get one folder, to promote social interaction between group members.

These folders possess all of the handouts, articles, photos and graphs that each group will need in order to successfully answer their section of their organizer. On the cover of each folder is the assigned topic that that particular group has to research.

Give each group **15 minutes** to read over all of the information given to them, and allow group members to combine thoughts and ideas. Each student should write down at least five facts based on their given topic.

Once 15 minutes are up, place students into **4 groups of 6**. Each group member should have a different color card and a different section of the graphic organizer already filled out. Students

should interact and share the information that they were able to collect. As students combine and organize their notes, they are working cooperatively with one another to complete their graphic organizers. Give students **10 minutes** to share the information that they have found with one another. After 10 minutes, each group member in every group should have a completed graphic organizer.

“Now that you are all experts on pollution and teamwork, let’s see how well you’ve mastered the lesson.”

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## Group Size and Roles

There will be 6 groups-each composed of 4 students, based on ability. These groups will work cooperatively together to complete the same section of their graphic organizer.

Each member of each group will be assigned their own individual role.

Roles include:

<b><u>Teamwork Leader</u></b> -Responsible for distributing a handout to each group member and reading the directions aloud.	<b><u>Time Keeper</u></b> -Responsible for making sure their group doesn't exceed the given amount of time allotted for their assignment. They should announce a five minute warning.	<b><u>Task Checker</u></b> -Responsible for making sure each group member is reading over their given article and recording information in their graphic organizer.
<b><u>Teamwork Checker</u></b> -Responsible for making sure each group member is participating and involved throughout the entire assignment. They are to motivate and encourage their group members to work as a team.		

Once complete, students will work in 4 groups-each composed of 6 students. These groups will contain students who all possess a different color card. They will teach other their new found information, and will then review their graphic organizers together.

**Green Folder Group****Topic: Causes of Pollution****Yellow Folder Group****Topic: Who is affected by pollution?****Orange Folder Group****Topic: Where is pollution?****Blue Folder Group****Topic: Types of Pollution****Red Folder Group****Topic: What can be done to prevent pollution?****Purple Folder Group****Topic: How are they affected by pollution?**

## Monitoring Cooperative Learning Process

As students are working together in their groups to research their assigned topic, walk around the classroom to assure all students are participating, and that each student is involved in writing down information. Do this by observing their teamwork, checking to see each student is fulfilling the guidelines of their assigned role. To those students who are not engaged in teamwork, point out the acronym of 'TEAM' on the blackboard and ask them to read it aloud with you. Remind students that they will be graded based on their participation and contribution to completing the task, in the form of teamwork.

Make sure that students are engaged in *face-to-face interaction* by placing their desks in a circle, so that they are sitting knee-to-knee, shoulder-to-shoulder. Observe whether or not students are using *social skills* to complete their task by checking off which skills you see each student using on the 'Social Skills' list.

Observe *positive interdependence* in that each student is supporting and guiding one another to solve their problem. Make sure each group member is fulfilling the tasks of their particular role. If they aren't, remind them that they are being graded based on their participation, as well as their contribution to their group through teamwork.

Once group members form into their second groups, make sure to observe *individual accountability*, in that each group member can teach what they have learned.

Monitor each student as they take part in *group processing*. During the close of the lesson, observe whether or not each student is filling out the evaluation rubrics, to proclaim what they and others have contributed to their group. If a student is not filling out the rubrics, clarify that the rubrics will help see where their strengths and weaknesses are socially, and guide them through it.

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## Independent Practice

*If time permits*

Give each student the worksheet titled “Pollution in My Community” and tell them to put their names at the top. Tell each student to *select* a type of pollution from their graphic organizer and to argue on how that pollution type affects their community.

Ask students to reflect on what they’ve learned about cooperative group work. Tell students to raise their hand to respond to the following questions. Accept more than one response for each question.

1. Why is it important to work as a team during group work?
2. How did giving each member of your group a role help you to succeed?
3. Why do you think each of you were to complete a self-evaluation rubric as well as a group-evaluation rubric?
4. In what ways do your group members help you to succeed?
5. What is meant by “There is no ‘I’ in team”?

*For homework*

Using each pollution type mentioned in their graphic organizer, assign students to recommend ways that they can prevent each of these pollution problems from reoccurring.

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## Assessment

**Diagnostic:** I will assess students’ prior knowledge by asking them to describe the word ‘Teamwork’ in an acronym.

**Formative:** I will assess students’ understanding by monitoring their group work. I will make sure each student is participating and acting as a team player, following the guidelines of ‘PIGS’ and face-to-face interaction.

**Summative:** I will assess students’ mastery of social skills and teamwork based on how their group members evaluated them on the rubric, and the responses they gave during the closure assignment. I will assess how well students have learned the material on pollution based on the independent practice assignment and the information written in their graphic organizer. They will

receive a 😊 for a completed graphic organizer and a ☹️ if it is incomplete.

## Closure

Each student should fill out a self-evaluation rubric and a group member evaluation rubric. This will allow students to individually express their understanding for social skills and what it means to be an active team player. Make sure each student puts their name at the top of each rubric as well as their specific group role and topic. Collect all rubrics.

Allow students to present their graphic organizers. Ask students to discuss one piece of information from each topic to the class.

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## Critique Questions

- √Was the acronym in my anticipatory set motivating and interesting to the students?
  - √ Did I explain the importance of teamwork clearly enough for students to engage in teamwork?
  - √Did my objective and purpose for cooperative learning motivate students to want to work as a team?
  - √Were the use of color coded cards and folders effective enough to get students into groups quickly?
  - √Did I choose the correct method of choosing groups, based on student ability?
  - √Did I allow enough time for groups to fill out their graphic organizers?
  - √Did I allow enough time for students to teach their groups their found information?
  - √Did I allow enough time for students to review their graphic organizers before the independent practice assignment?
  - √Did the response questions during the closure allow students to effectively interpret their understanding of social skills and teamwork?
  - √Did the assignment effectively promote teamwork?
  - √Did I create easy to follow evaluation rubrics?
  - √Were the responsibilities of each group member stated clear enough for each student to carry out their role?
  - √Were the handouts given in each group's folder grade appropriate and easy enough for the students to understand?
  - √Did I supply each group with enough information to fill in their designated topic?
  - √Did my monitoring of each group help promote teamwork?
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Name:

Topic:

**Group Evaluation  
Rubric**

	<b>1 Wasn't involved</b>	<b>2 Could have done better</b>	<b>3 Was a great team player</b>
<b>GETTING SET</b>	Noisy. Moved too slowly. Didn't know where to go or interfered with other groups.	Moved into group reasonably well, ready to get to work. May have had work. Needed a reminder or two from the teacher.	Moved efficiently and quietly into group, ready to work.
<b>BEING CONSIDERATE</b>	Noisy. Failed to take turns. Failed to listen. Hurt feelings of others in group. Argued or interfered with other groups.	Worked reasonably well together. May have needed a reminder or two from the teacher.	Worked quietly together. Took turns. Listened to each other's ideas. Supported and helped each other. Together, asked for help from teacher as appropriate.
<b>DOING ASSIGNMENT</b>	Off task. Wasted time. Argued. Unable to work out problems without lots of teacher intervention. Unprepared. Unable to decide who needs to do what. Failed to share workload or failed to meet deadlines.	Stayed on task most of the time. Everyone did his fair share. Finished on time. May have needed a reminder or two from the teacher.	Stayed focused. Everyone worked well together to accomplish assignment goals.
<b>QUALITY OF WORK</b>	Didn't write down any information.	Only wrote 1 or 2 pieces of information on their assigned topic.	Wrote at least 5 pieces of information about their assigned topic.
		.	.

**Group Members Names:**

	Getting Started	Being Considerate	Doing Assignment	Quality of Work
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____

### Self-Evaluation Rubric

Name \_\_\_\_\_

Group \_\_\_\_\_

**CL Group Project Name:**

**What I did to help my group's success during this project:**

**My participation was:**

\_\_\_\_\_ 3

Wasn't involved

\_\_\_\_\_ 2

Could have done better

\_\_\_\_\_ 1

Was a great team player

**My personal contributions to the group project:**

## **Directions for Assignment**

### **(to be read by team leader)**

For this assignment, you will work together in groups of 4 to fulfill the tasks of your particular topic. As a team you will review the given materials and fill out your section of the graphic organizer.

Once complete, you will get into groups of 6 to share your new found information. You will teach each other the information that you have gathered, and then review what you have learned.

After your graphic organizer is complete and you have reviewed all of your information, you will be assessed on how well you've mastered the material through a session of questioning and answering, without the use of your notes.

**Good-luck!!!**

**Remember that you are a team!!!**