

Equipped for the Future

Visiting a Recycling Facility

Project writer

José Carmona

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Project Based Lesson Plan II-21

Project Title: Visiting a Recycling Facility

ESOL Language Focus: Reading Writing
 Speaking Listening **Level(s): 4, 5 and 6**

Florida Adult ESOL Course Competencies:

64.0, 81.0, 98.0 Environment and the World, specifically 64.03, 81.03A/B, and 98.02B/C
 60.0, 73.0, 74.0, 91.0, specifically 60.01/02/03 , 73.01, 74.02, 91.02

EFF Standards and Roles:

Read with Understanding	Solve Problems and Make
Write with Understanding	Decisions
Speak So Others can Understand	Use Info. & Com. Technology
Listen Actively	Plan

Classroom Activities/Procedures:

1. Discuss and introduce new and previously learned vocabulary.
2. Give students the following questions to discuss in pairs or groups:
 - a. Do you recycle? Why or why not?
 - b. What types of things do you recycle?
 - c. Do you know why recycling is important?
 - d. Do people recycle in your country of origin? Why or why not?
 - e. What did you know about recycling before you came to the U.S.?
3. Have students share their results with the class.
4. Have students read graphs/articles on recycling and find 10 words they don't know to share with the class.
5. Have students discuss and share the expectations of visiting a Solid Waste/Recycling Facility.

Preparing/Executing the Visit to the Local Solid Waste/Recycling Facility

Divide the job from arranging the visit to writing the thank you letters among students as suggested below.

1. Have two students visit the school Physical Plant or Custodial Office to ask about the existing recycling program
2. Have two students make an appointment for a group visit and get directions to the local recycling facility.
3. Have two students investigate how to arrange for a van from the school to transport the class.
4. Have six to eight students research and bring information to the class about recycling.
5. Have two students write letters of thanks to the presenters and/or tour guides from the recycling facility.
6. Have two students proofread the letters. 7. Have two students plan trip by determining distance, mileage, etc.
8. Three to four students develop questions to ask the presenters/guides at the recycling facility.

Important: Every student needs to report his/her findings to the class as the assigned job is completed.

Vocabulary:

garbage	phonebooks
litter	junk mail
trash	methane gas
landfills	environment
cardboard	solid waste
recycling	hazardous waste
bins	aerosol cans
dump	ammonia cleaners
aluminum	bug sprays
steel cans	motor oil/gasoline
leachate	paint

Resources:

Student/Instructor Articles
 Local Recycling Facility
 Local/Regional Environmental Protection Agencies
 Physical Plant/Custodial Office
 School and/or local library
 See Reference List

Out of Class Assignment(s):

- 1 Call local Solid Waste/Recycling Facility to make an appointment for a visit.
- 2 Divide jobs among students to prepare a visit to the local facility.
- 3 Research information about recycling.
- 4 Attend organized visit to the local Waste Management/Recycling Facility.
- 5 Have students write a short reaction to the visit.

Materials Needed:

1. Magazine/newspaper articles and graphs on recycling
2. School letterhead to write thank you letters
3. Worksheet with questions outlined in classroom procedures.
4. Lower levels may benefit from real recyclables such as bottles, cans, etc.

Summary

- a) The project took five weeks, but not all of it was classroom time. As mentioned above, students worked on their own time quite often. The class met twice per week for 1.5 hours because these were advanced students; thus, a class that meets twice per week for three hours would be able to complete the project in much less time. Three entire class periods were devoted to the project: one to explain and disseminate student assignments (introduce vocabulary, etc.), one to go over student assignments completed and to prepare for the trip to the recycling facility, and the last one to debrief after the visit. However, there was an allotted time of about 30 minutes per week (15 minutes of each 1.5 hour class) to discuss the shortcomings and successes of the project during the five-week project. Please, notice that the project takes much less time to accomplish if students meet more than 3 hours per week.
- b) Some suggestions for completing project are:
1. Organize the project ahead of time in stages and possible time frames.
 2. Assign students who do not speak the same first language to each group as much as possible.
 3. Allow time for discussing problems/shortcomings at every class session while the project is in progress. This will maintain the momentum and help assess student involvement and completion of project.
 4. Local recycling facilities, for the most part, do have educational programs for students of all ages; however, have students assigned to arrange for the visit call right away because they may be booked or temporarily closed to the public for various reasons such as renovation, staff absenteeism, etc.
 5. Relate project to established classroom curriculum. As an example, the environment was one of the three themes allocated to this course. This will also allow the teacher to complete required curriculum without feeling stressed for time.
 6. Follow up the appointment to the facility since sometimes they would rather speak to the teacher in charge of bringing the students.
 7. Since most facilities conduct free tours, make sure to follow up with a thank you letter to each individual person your class dealt with.
 8. Give enough time for discussions about topic and for student reporting.
 9. Have students work in no less than pairs since their comfort level with the language would be much higher.
 10. Utilize school and/or community resources to enhance the project. If a visit to the local recycling facility fails, it is much easier to invite a speaker from the facility to present. The school and/or local library are also good sources of information.
 11. If computers or a lab is available, take students and show them how to research information on the topic. For this project, the students were taken to the lab for part of one class period.
 12. Relax and let the students do it all; the teacher is merely a facilitator.

References

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World Watch Institute, 1992.
- Elkington, John, Hailes, Julia and Joel Makower. The Green Consumer. NY: Penguin B., 1990.
- Folse, Keith S. Discussion Starters: Speaking Fluency Activities for Advanced ESL/EFL Students. Ann Harbor, MI: U. of Michigan P., 1996.
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- Naar, Jon. Design for a Livable Planet: How You Can Help Clean Up the Environment. NY: Harper & Row, 1990.

Final Teacher Report

EFF Project-Based Classroom Project

Name: *José A. Carmona*
Institution: Daytona Beach Community College
Topic: Visiting a Recycling Facility

1. Explain how the project improved your students' English language acquisition? Which activities were most helpful?

The project had students more involved in the classroom. Students came more often to class and participated more in discussions. In fact, the students who were usually shy became more active in the project planning process as well as in the classroom discussions. As they used the new vocabulary in class and while participating in the planning of the project, students became more comfortable speaking English and utilizing their writing skills.

The highlight of the project was visiting the recycling facility. As the trip progressed, it became more obvious that they had expected an archaic, smelly, hard to stand type of place. When asked about their opinions about the facilities by the tour guides, many of the students were astonished at the clever, well-planned, and careful way a solid waste/recycling facility operated. What they expected to what they actually saw was not only voiced by the students but also expressed on their faces. Having students talk about recycling and the treatment of garbage in their countries made them realize the similarities and differences between their own country of origin and the U.S. Most importantly, the actual participation in the planning process made students feel that this was their project.

2. How was student attendance impacted by the project? Explain.

Student attendance improved enormously. The students, who would rarely come to class, came prepared and on a daily basis. For this to happen, the project has to be identified and run as a whole depending on its parts to function. That is, students were told that if they would not do their part, the project would not be accomplished. Taking them out of the classroom was a big incentive: the project was not an enclosed, inside-a-room type of project but a way to gather information

outside and act upon this information. In essence, the students felt empowered to develop something of their own and carry it out on their own.

3. Describe how the students organized to accomplish team goals.

Students met in class and outside of class. Many used the classroom as their home base. They would come to class prepared with their accomplished goals and leave the classroom to accomplish the next goal. Some students went as far as visiting each other to meet and carry out their goals.

4. Would you initiate another project-based activity in your class? Why or Why not?

Definitely! Faculty and staff alike were amazed at how the students were talking about the project in their classrooms, the lab, etc. They seemed to have enjoyed taking the theory and putting it into practice. I normally thought projects like this one would take away from classroom time; however, students were meeting and utilizing out-of-class time more than expected.

5. Additional comments on the project and its impact on students.

Students were fascinated by the project. After experiencing how some people just threw recyclables in the garbage that would sit in dumping sites for years, many commented on becoming more active participants recycling.