Industry-related ESL for Manufacturing

Background information for the instructor:

As was discussed in previous lessons, the responsibility of maintaining quality and continuously seeking improvement in a manufacturing organization lies within each employed individual. Each employee contributes to the ultimate success of an organization through a collective effort built on teamwork.

This includes achieving quality, removing delays and process errors, enabling optimal manufacturing production, identifying and eliminating problems, monitoring, and measuring and improving overall manufacturing performance which requires teamwork, collaboration and communication.
In lesson 2.4, the students learned about the challenging skills, demands and requirements placed on a worker’s performance. Present day workers are expected to fulfill duties and tasks in an increasingly competitive environment. The success of one worker's performance is dependent on that of every other individual who is considered an integral part of the organization. Interdependency and communication between managers, supervisors, and employees are essential components that are intertwined in a successful manufacturing environment.

In this lesson, the students will practice team building approaches which are used for problem-solving and decision-making when dealing with quality improvement in the manufacturing world.
### Lesson Objectives

- Recall and understand background information
- Generate and orally practice industry-related vocabulary
- Listen to understand information about the characteristics of a good team
- Participate in two team-building activities to develop team collaboration skills and problem-solving experience
- Identify words with vowel combinations that create long vowel sounds
- Read a selection of related questions about a learning activity prompting student oral discussion
- Construct meaningful sentences responding to questions about team building activities

### Assessment Evidence

- Informal listening/observation of student participation
- Informal listening/observation of student brainstorming and participation
- Informal listening/observation of student participation
- Informal assessment of student participation and completion of activity
- Informal assessment of student participation and completion of activity
- Informal listening/observation of student participation
- Completion of activity for student portfolio
Develop students’ background information:

There are several key elements in the workplace that promote successful working environments; communication is at the top of the list. Every work organization uses various channels to communicate expectations and company goals and to continuously seek improvement. Meetings represent one vehicle of effective communication while presentations, another. Verbal, written and electronic communication include other channels that are used to get the message across.

Another key element in a successful working organization is team building. Successful working organizations explore the concept of team building as a means of instilling the notion that individuals are working together toward a common purpose or goal. Team building can be perceived as people interacting with each other. Team building develops positive attitudes, enhances morale and creates and sustains relationships based on trust, support, respect, collaboration and communication among its members.

This lesson will focus on team building in the workplace as a means of promoting positive communication for an effective approach to problem-solving, decision making and continued quality improvement in the workplace.

Materials: Flip chart paper, markers, student notebooks, 3X5 note cards, glue, for each group of five students: two complete (old) newspaper issues, one roll of masking tape, small bowl of candy and two tennis balls for every eight students

Initial Inquiry

Tell the students that a family can be perceived as a team with all of the members working toward the same goal. Working in manufacturing can also be seen as individuals working as part of a team with all its members striving toward a common goal of success.

Initiate a discussion with questions like:

- Can you name some sports that are played in teams?
- For what does a team work hard?
- Can you think of a situation where workers act as a team?
- Who wins in a workplace situation that involves team effort?
- Why is team building important in the workplace?
- What does a team tactic accomplish in the work environment?

Accomplish = lograr
Accept all reasonable responses from the students. As they share their ideas, jot notes on the flip chart while underlining the key vocabulary that emerges. The instructor may assist the students to elicit key terms. Orally define the vocabulary with students’ input. Explicitly point out the cognates (words that share similar spelling and meaning in two languages). These are highlighted on the suggested vocabulary list. Practice reading the cognates and draw the students’ attention to the pronunciation while focusing on the vowel sounds and tricky consonants (proposals, objectives, interaction, communication, collaboration, resolution, presentation, vision, morale). Post the generated vocabulary on the classroom wall. Have the students write the vocabulary in their notebooks.

**Suggested vocabulary might include:**

- communication
- problem-solving
- decision making
- message
- sender
- receiver
- information
- purpose
- meetings
- success
- team work
- interaction
- support
- leadership
- proposals
- objectives
- input
- effort
- working relationships
- respect
- interdependence
- commitment

- team building
- forming
- performing
- team interaction
- collaboration
- conflict resolution
- vision
- common goal(s)
- systems
- presentations
- oral
- written
- electronic
- listening
- feedback
- measures of success
- trust
- quality improvement
- positive attitude
- morale
- people skills (social)
- members
Learning Activity
Part 1

Tell the students that good team building is characterized by several key features. Write the following on the flip chart. Read each descriptor as the students echo read. Check for understanding and clarify as needed.

characterize = caracterizar, determinar
features = caracteristicas, atributos

Characteristics of a Good Team

- A good team has a high level of interdependence among members.
- The team leader has good people skills and is committed to a team approach.
- Each member is a contributing member.
- It has a relaxed climate for communication.
- Members develop a mutual trust.
- The group and individuals are prepared to take risks.
- The group has clear goals and established targets.
- Member roles are defined.
- Members know how to examine errors without personal attacks.
- The group has the capacity to create new ideas.
- Each member knows s/he has a voice in the team.

The following synonyms and translations may be helpful.

Spanish Translations:

- committed = tenaz, firme
- trust = confianza
- risk = riesgo
- targets = blancos (metas)
- roles = papeles (de un actor), funciones
- to have a voice = contribuir a

Refer the students to the page in the student workbook titled Characteristics of a Good Team. Lead the students in a group discussion of the key elements that make a good team. Elaborate on the key words and phrases of each point. Stress to the students that effective team building techniques strive for interdependence among the team members. Remind the students that the actions of the individual affect the group. A working team should also be considered as one part, one piece or one link contributing to the success of the greater picture of the total organization.
Assessment: Informal assessment of student participation
Learning Activity
Part 2

Materials for each group:

- Two old newspaper issues (complete)
- One roll of masking tape
- One bowl of candy (styrofoam or paper)

Group the students in teams of five. Tell the students that cooperation requires clear communication among all team members involved so that team approaches, strategies, problem-solving and decision making can be accomplished quickly and effectively. In addition, inform the students that there will be disagreement and conflict arising in team interactions and they must be willing to overcome these through good team building strategies. The focus of team work should be to meet the objectives and goals of the group activity.
Write the following activity rules on the flip chart:

1. The only materials allowed are newspaper and masking tape.
2. Team members should select a group leader to keep the group on task (on the job).
3. Each team should **build a bridge** for the local Department of Transportation.
4. The bridge structure should be able to stand on its own.
5. The bridge should be wide enough at the base for the bowl of candy to slide under it.
6. The bridge must be strong enough to support the weight of the bowl of candy.
7. The bridge must be free-standing, not attached to the wall, a piece of furniture, a person, the floor, etc.
8. Each team will have fifteen minutes to complete the activity.
9. HAVE FUN!

Refer the students to the page in the student workbook entitled *Build a Bridge*.

Hand out the materials needed for the activity. Remind the students of the time limit. As the students work in teams, circulate and listen for verbal student participation and interaction. Encourage the students to use English while interacting in teams.

When the time limit is up, regroup as a whole and have the team leaders report to the class. Each team should explain the process they followed in building the bridge and demonstrate the effectiveness of the structure built.

As a wrap-up activity, the instructor should focus the students’ attention on the desired results of the team-building activity: to meet the objectives or goals, to develop interdependent skills among group members, group collaboration and individual problem-solving strategies.

**Assessment:** Informal assessment of group collaboration and completion of activity
Learning Activity
Part 3

Materials for each group:

- **Two tennis balls**

Divide the students into teams of eight. Tell the students that in this team-building activity, they will imagine they are on a manufacturing production line. Write the activity rules on the flip chart:

1. Each team is in competition with the other participating teams. The group that completes the most “circuits” during a five minute time interval is the winner.

2. A complete circuit is obtained when every person in the team has touched the tennis ball.

3. Only one person on the team can touch the tennis ball at one time; this means the ball **must be tossed** rather than passed on to the next person. (toss = lanzar)

4. If the ball touches the floor, the production must stop for one minute before starting over.
5. Team members must focus on communicating with each other productively, discussing techniques or strategies to help them be successful in tossing the tennis ball and keeping it from hitting the floor.

6. Assign one team member to keep count of the completed circuits.

7. Each round is five minutes in duration.

8. HAVE FUN!

Refer the students to the page in the student workbook titled Keep It Going!

Have the teams arrange themselves in a circle. Before beginning the activity, have the students play a trial run to get them comfortable and used to creating different patterns to be more time efficient.

The instructor is the time keeper. As the students participate in the activity remind them to use English to interact with each other. When the first round is finished, the instructor may want to add an additional rule to make the process more challenging. For example:

A co-worker calls in sick. One team member is removed from the circle of participants. Begin the next five minutes round of circuits. After they complete the round, remind the students that regardless of their co-workers’ absence; his/her work must have been covered. This means the teams should have had one member touching the ball twice to compensate for the absent employee. This means that circuits with less than eight contacts do not count and must be discounted.

Another variation of the activity can include a second tennis ball for each team.

Give each team a second tennis ball. Tell the teams that the client/customer wants them to double the production. Begin the next five minute interval. Tell the students that only one ball can be held by any person at a time. Each member should make contact with each ball once to count as a complete circuit.

As a wrap up activity, the instructor should focus the students’ attention on the desired results of the team-building activity: to meet the objectives or goals, to develop interdependence skills among group members, group collaboration and individual problem-solving strategies. Encourage the students to share their strategies with the whole group. Tell the students that effective team strategies are also used in the manufacturing workplace as well.
**Assessment:** Informal assessment of group collaboration and completion of activity

**Sounds of English**

Tell the students they will learn about some vowel combinations that appear in the vocabulary words in this and other manufacturing lessons. Several vowel combinations occur in words in the English language. A *vowel combination* is a combination of two or three vowels, or of a vowel and at least one consonant, which is associated with one or more specific single sounds. In this lesson, students learn the rule: “*When a syllable has two vowels together, the first vowel is usually long and the second is silent.*”

Write the rule on the flip chart and have the students copy it in their notebooks. Give the students the following examples: *chain /ʃæn/, gear /gɛə/, load /lɔd/, due /dju:/, slow /səʊ/, few /fu:/, height /hɛɪt/ and die /daɪ/. Point out the vowel combinations and the long vowel sound in each example. Note: point out that height includes consonants, that is, -igh or -eigh = ɪ and that w acts as a vowel after o and e.

Tell the students that because of the vastness of the language and the many languages from which it has borrowed, there are many exceptions to the rule. However, the rule does work in the many of the words.

Refer the students to the page in the student workbook titled, *Long Vowel Sounds*. Tell the students the words on the page are from the vocabulary they are learning or have already seen. Read each word carefully. Point out the vowel combination in each word. Remind the students of the rule: “*When a syllable has two vowels together, the first vowel is usually long and the second is silent.*” Tell the students the long sound of a vowel names the letter. Say the name of each vowel pausing between each: a, e, i, o, u. Point to one vowel at a time and say, “the name of the letter is Aa, the long vowel sound is /æ/. The name of the letter is Ee, the long vowel sound is /ɛ/. The name of the letter is Ii, the long vowel sound is /ɪ/. The name of the letter is Oo, the long vowel sound is /ɔ/. Finally, the name of the letter is Uu, the long vowel sound is /ʊ/. Have the students repeat the name and the long sound for each vowel. Then continue with the words on the student page.
Write one word at a time on the flip chart. Read each word carefully and point out the vowel combination in each. Mark the long vowel in each word with a short line above the letter. Have the students do the same in the text page.

fēed·back  tēams
fēa·tures  ex·plāin
trēat·ment  rē·léase
pēo·ple  shōul·ders
rēach  trāin
bōat  rē·māin
mēeting  tōw
blūe  grōws
rē·cēiver  tie
cōal  dēw
scrēw  pie

Point out the word pairs screw-dew and tow-grows. These words contain a vowel/consonant combination which produces a long vowel /ū/ and /ō/ sound respectively.

Have the students read the sentences at the bottom of the page to a partner and then reverse roles.

**Assessment:** Informal listening and observation of the students’ oral reading and participation.

**Related Language Activity**

Tell the students that in this activity they will learn about the verb “to have” in the present tense. They will also review and practice the subject pronouns using the verb to have and industry-specific vocabulary.

Ask the students to turn to the page in the student workbook titled Pronouns and the Verb to have. Use this page to review pronouns and the present tense of the verb to have.

Have the students work with a partner. Have them take out their notebooks of generated vocabulary for this lesson. Tell them that together they will help each other construct ten simple sentences using subject pronouns (I, you, he, she, it, we, they) and the verb “to have” in the present tense. Write the following example on the flip chart:

**I have work to do in two teams.**
**Assessment:** Circulate and observe each pair of students. Use the Collaborator Rubric to assess participation, collaboration and completion of task.

**Reading in Context**

Direct the students to the page in the student workbook titled Discussion Questions. Tell the students that these questions correspond to the team-building activity in which they constructed bridges. Lead the students in an echo reading as they follow along. Read slowly and enunciate clearly. Read one question at a time. Check for understanding and clarify as needed. Pair the students and have them read to their partner.

**Assessment:** After reading the questions, have the students work in teams to discuss possible answers to the questions. Encourage the students to use English. Circulate and assist as necessary.

**Writing in Context**

Refer the students to the page in the student workbook titled Assessing Our Team Effort. Have the students use the responses from their team’s oral discussion to answer the ten questions in complete sentences.

**Assessment:** Completed activity for student portfolio

**Summary**

Have the students summarize the day’s activities. Write the summary on the flip chart. Ask questions like:

> “What did you learn today?”

> “May I ask for a volunteer?”

The students’ responses should include comments like:

> “Today we learned about the characteristics of a good team. We participated in two team building activities that resemble a workplace problem-solving situation. We learned that teams develop interdependence among all team members. We learned some words containing vowel combinations make a long vowel sound. We learned to identify the long vowel sound that different vowel combinations make. We also learned to use and recognize the correct pronoun and the present tense of the verb “to have”. We read some questions about a team building activity. We answered these questions in writing.”

Have the students complete the Lesson #4.4 Lesson Review.