

COMMUNICATION SKILLS
THAT ARE ESSENTIAL FOR
SUCCESS IN THE FIELD OF
INDUSTRIAL ENGINEERING.



COMMUNICATION IN INDUSTRIAL ENGINEERING

EFFECTIVE
COMMUNICATION IS
ESSENTIAL FOR SUCCESS
IN THE FIELD OF
INDUSTRIAL
ENGINEERING.

“Communication can be defined as the process of exchanging information, ideas, and messages between individuals or groups through a variety of channels, such as verbal, nonverbal, written, or visual.

Communication is a fundamental aspect of human interaction, and it allows people to share their thoughts, feelings, and experiences with others. Effective communication involves not only the transmission of messages, but also the understanding of those messages by the receiver. It requires the use of clear language, active listening, and an awareness of cultural and social factors that may impact communication. Effective communication is essential for building relationships, resolving conflicts, making decisions, and achieving shared goals in both personal and professional settings”.

SOME OF THE
COMMUNICATION
SKILLS THAT ARE
PARTICULARLY
IMPORTANT FOR
IE:



1. TECHNICAL WRITING

The ability to write clear, concise, and accurate technical reports, memos, and other documents is critical for industrial engineers. They need to be able to communicate complex technical information to a variety of audiences, including other engineers, managers, and customers.



2. ORAL COMMUNICATION:

- Industrial engineers need to be able to communicate effectively through oral presentations, whether to present project updates to management or to give technical training to other team members.

Oral Communication

“Oral communication is the ability to express oneself clearly and effectively in speech. It involves not only the use of words, but also tone, body language, and other nonverbal cues to convey meaning and build rapport with others.”
- The American Speech-Language-Hearing Association (ASHA)”



**Face to Face
Conversations**



**Presentations &
Speeches**



**Electronic
Communication**



**Meetings &
Discussions**

ACTIVE LISTENING:

- Listening actively and attentively is an important skill for industrial engineers, as it helps them to understand the needs and concerns of stakeholders and team members.

PARAPHRASE.

Try to paraphrase what the student said to make sure you understand and to show that you are paying attention.



ASK QUESTIONS.

Ask questions to encourage the student to elaborate on their thoughts and feelings.



USE POSITIVE BODY LANGUAGE.

Show that you are engaged and interested by nodding, facing the other person, and maintaining an open and relaxed body posture.



SHOW EMPATHY.

If the student voices negative feelings, try to validate them. Consider why they feel this way and put yourself in their shoes.



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Tips for

ACTIVE LISTENING



LISTENING MAY BE ENOUGH.

We may be tempted to "fix" the problem, but at times, students just want us to listen.



EVALUATE THE CONVERSATION.

After you have fully taken in what the student has said, take a moment to evaluate the conversation.

DON'T GIVE ADVICE TOO QUICKLY.

Allow the student to finish speaking before attempting to give advice. You want to make sure that you fully understand them first.



AVOID JUDGMENT.

Your goal is to understand your student's perspectives. Try not to interrupt with your own opinions while the student is speaking.



3. TEAM COMMUNICATION:

- Industrial engineers need to be able to work effectively in teams, which requires strong communication skills, including the ability to collaborate, negotiate, and resolve conflicts.



How to improve team communication

4. CROSS- CULTURAL COMMUNICATION:

- With the global nature of many industries, industrial engineers often work with people from different cultures and backgrounds. They need to be able to communicate effectively across cultural differences and understand how cultural factors may impact communication.

Cross Cultural Communication

Identify Personal &
Cultural Values,
Rituals and Beliefs

Understand the
Underlying
Meanings in Words
and Body Language

 Malay Language



Improve Work
Performance, and
Manage
Expectations

Personal one-to-one
Small group
Family + Children
In-house

Pick up Cultural Tips,
Do's and Don'ts

To register, email to language@merapiindah.com
www.merapiindah.com.my/Malay

5. PERSUASION AND INFLUENCE:

- Industrial engineers often need to persuade stakeholders and decision-makers to adopt new ideas or approaches. Effective persuasion requires strong communication skills, including the ability to articulate a compelling argument and address objections.

The 6 Principles of Persuasion

Reciprocity

When we receive something, we feel obliged to give something back.



Consistency

We feel compelled to be consistent with what we've said/done in the past.



Social Proof

When we're uncertain how to behave or react, we look to others for answers.



Liking

We're more likely to agree to someone's request if we know and like him/her.



Authority

We tend to obey figures of authority (people with titles or expertise).



Scarcity

We perceive something to be more valuable when it's less available.



Persuasion

My way

Sells my ideas & value

Stories/data build leverage

Susceptible to reassessment

Builds loyalty

Negotiation

Joint decision

Shares ideas & trades value

Concessions build leverage

Sustainable mutual decisions

Builds trust

Addresses interests

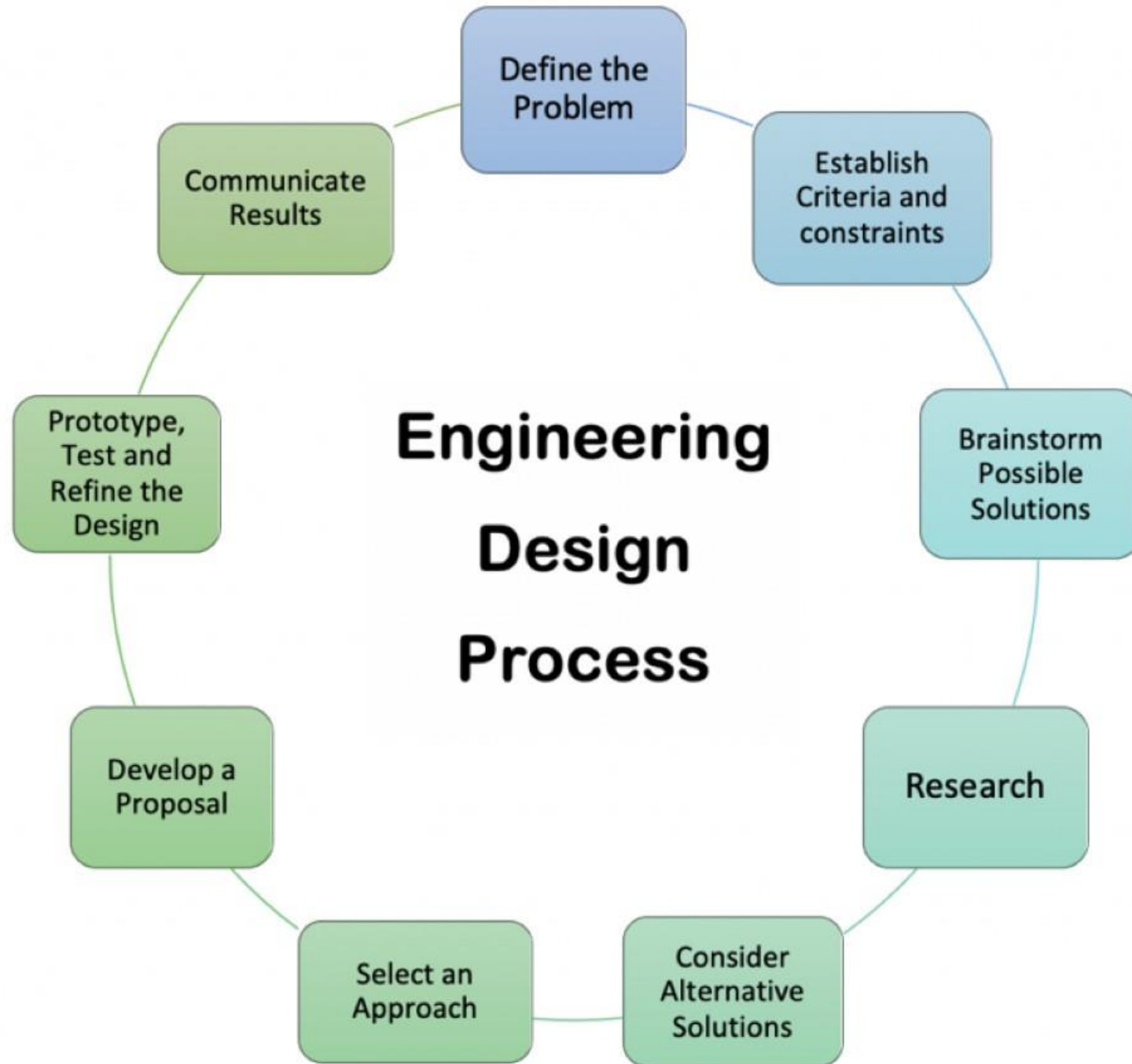
Requires rapport & trust

Supported by legitimacy

Can be used to manipulate

5. PROBLEM- SOLVING COMMUNICATION:

- Industrial engineers need to be able to communicate effectively about complex problems and work collaboratively to develop solutions. They need to be able to explain technical concepts and ideas clearly, and to listen and respond to feedback and input from others.



GAME/ACTIVITY (TEAM COMMUNICATION)

- Asking students to stand up all, then to stand in a space in a group. Then, the instruction is to walk randomly, each one of them, then if one student stop, the others have to stop too. But, if just one other student start walking, everyone has to walk.
- Part 2: to take out the ones that they are leading unconsciously the others and to re-do the activity.
- Objectives: to develop :
 - -Teamwork
 - Communication
 - Observance
 - Obedience