

Emerging Energetic Communication of Engineering Students and Teachers

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Abstract: Engineering students and teachers in contemporary organizations are frequently astonished at beginner's willingness to learn their innovation persistent efforts in personal growth and other artistic and athletic attentiveness. Experienced and highly technical oriented engineers are interested to acquire the recent updates more effectively. The primary responsibility of the teacher of an engineering institution is to create the productive aptitudes to the student engineers. The engineers should be motivated to enhance their questioning skills, energetic communication and other principled characters by the engineering teacher/ mentors. Communication is the professional necessity of most activities .It indicates one's personal aptitude, presentation and professional prediction towards his Field. Communication generates a healthy connection among his fellow colleagues and students. It is not only focusing on inside the teaching premises also the outside of the organization. Communication brands the world more energetic. The contribution of communication in social network is not computable.

Keywords: Engineering, Encoding, Transmission, Decoding, Barricades

1. Introduction

The Growth of an Institution or a company depends on the employer's performance and exclusively their skills in communication play a vital role than everything. The engineer's ability

in communication contributes large scale of credibility to their working place and environment. Further, it satisfies their qualifications. Communication skill of an employee assures to occupy his permanent place than his job-related potential in his working organization. No other profession teaches communication than the teaching to acquire their skills peacefully but effectively and it is a noble profession forever. Expressing their innovative ideas and inquire their quarries in the engineering filed, Communication is full-fledge significant.

2. Engineering Students

The students who are pursuing their Diploma, under or post graduates in engineering specifications underneath the guidance of competent and certified engineering teachers to approve a degree in their relevant engineering studies .Communication strengthens the engineering students to improve their confidential and self-respect in their pertinent field to compete to their fellow engineering students and the engineering teachers on their subject and innovative technical ideas through their questioning mind .To create this significant forum among the engineering students ,Their class rooms are the primary platform. Classrooms are strengthening all engineering students to obtain self-confident to face the society. The modern teaching tools respectively distillate on communication of engineering students in their different field of studies.

3. Communication

Communication is a multi-users track.Message from the sender is transformed to the receiver/Receivers through different style /type of communication. The engineering teachers convey their subjects in various aspects of communication such as writing, speaking, listening and reading by using new technology. The impact of sender and receiver reflect their originality through the medium of communication .Technology plays a dynamic character in modern communication at engineering teaching.

4. Process of communication

Encoded message from the sender is transferred to the receiver and decoded to respond for the received message. Communication process keeps moving on this way. The below Fig 1.1 shows the process in communication.

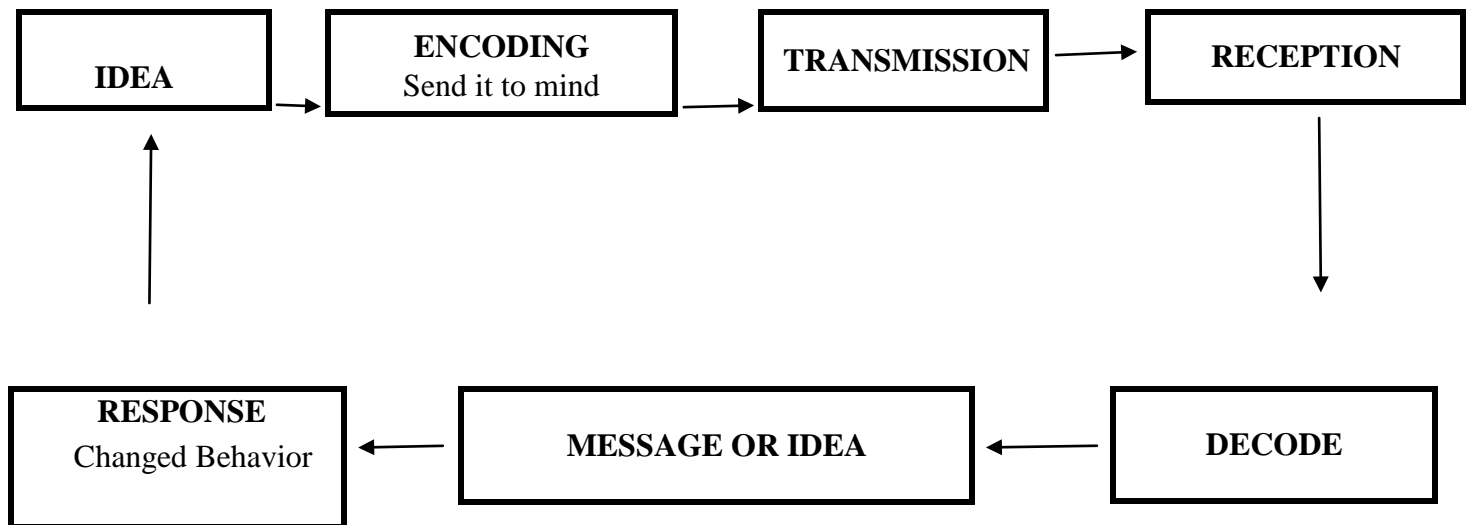


Fig. 1.1 PROCESS OF COMMUNICATION

The sender transfers a portion of his ideas and thoughts about a specific subject. These are heard and encoded together by the receiver. This is transmitted through the nerves of the human body to the brain. It receives these groups of words and decodes it to get the message or idea. This becomes registered in the memory region of the cerebrum. This produces a favorable reaction if the subject is recognized or produced an argument if it is disagreeable. This is called “Chain Behavior”

The following significant stages are categorized in the process of communication

Ideas or messages: Framing the content of communication

- Encoding : organized to form a sequence
- Transmission : Encoded message is passed from sender to receiver
- Receiving : Received the same message without any changes
- Decoding : Listener interprets the message
- Response : Acts through his response to the interpreted message

Ideas : Content is framed by the listener to the above process

5. Influences in Communication

These following influences in the form of arising questions make an eloquent communication. It further inspires the listeners to involve effectively throughout the communication ends.

- a) Topic selection (what to communicate): The topic selection makes great impact in communication and it leads the receiver and sender to travel together without contentious tediously.
- b) Timing and surroundings (When to communicate): For effective communication, Sender must deal the right time and the surroundings to convey his message.
- c) 3. Motive to communicate (Why to communicate) : An accurate communication is not fulfilled without a motive or reason and never leads to meaningful and interesting.
- d) Approaches of communication: By following different approaches the sender conveys his expressions or thoughts to the receiver in communication such as Charts, Pictures and Cartoons. Using these approaches the senders impress the receivers quickly than oral, written or other type of communication.
- e) Appropriate place: (Where to communicate) the sender must distillate on the place where he /she expresses their thoughts. A right message should be conveyed in a right place or otherwise it will lead into misunderstandings.
- f) Exact person: (whom to communicate) finally the communication must reach the right person in inaccurate language. The sender should vigilant in conveying the right message to the right person with the level of language.

6. Stages of Language

The sender transfers his expressions/thoughts in the form of message to the receiver .While delivering his message to the receiver, the stages of language plays a vital role and important. There is a level of language spoken between teacher and student, at the same time another level of language is spoken among students. The stages of languages are differed by whom they are communicating. The below said stages explain it.

- a) Directive Language: Top designated person to bottom using commanding style.
(Manager with clerk)

- b) Executive Language: Casual talk between equal rank holders. (Student with his fellow student)
- c) Explanatory Language: The message should be explained concisely in a polite route (Clerk to Manager)

7. Oral Communication

It is a style of communication the message is transmitted through sound, signs and postures etc. The primary ingredients of this communication are clarity, accuracy, empathy, honesty, leisure, eye contact, posture and rhythm of voice. It needs the four senses, i.e., audio, visual, touch and odor.

7.1 Listening

Listening precise information is significant. It is also precious since it creates the necessary conditions in which the mind can get to work, to sort out, reform and digest what is being said. It is all the basis of all human knowledge. Fine listeners are liked by others because they convince the basic human needs of being heard and being wanted. People who listen healthy are bright to detach fact from fiction, to cope efficiently with false plagiarism and to shun having others use them for personal gain. Listening is not only to the words but also the feelings and the memorandum as a whole. While all human beings are poor listeners at times, some are poor listeners most of the time. It is essential to evaluate the listening habits of students and teachers, so that they can initiate treating symptoms. A person's listening will convey his attitudes to other people as surely as the way which he speaks to them.

7.1.1 Clues for Effective Listening

- i. Listen actively and objectively, compassion, understanding.
- ii. Concentrate on the speech.
- iii. Listen not only verbal instructions but also non-verbal expressions.
- iv. Listen for the most important ideas and supporting facts.
- v. Make notes when it is appropriate without interfering with the communication process.

While listening the individual should get better their job recital, open door for ideas and thus encourages creativity, learning should be enhanced and job accomplishment should be increased when there is a good listening and participating in the mutual trust.

7.2 Speaking

Speaking means exchanging or giving out the news, ideas, facts and information to others. The speech depends on the environment and need. Speech expresses the thoughts, feelings, opinions, beliefs and ideas. The expressions depend on the affiliation between two or more individuals and it can be formal or informal. The facts, figures and the information collected through reading, listening are great extent while preparing a speech. The rational development of the speaker is an supreme part of the speech preparation. The speaker should expand the custom of thinking and generalization and endlessly boost up the knowledge and bring up to date the information. It is important to consider the time, occasion and the mood of the audience. The scope and purpose should be strong-willed by the speaker.

- **Golden Principles Avoid abstract terms:** The speaker should not exercise abstract stipulations and phrases which are quite vague and cannot be understood easily by the spectators. Instead, the speaker can prefer tangible terms which can be effortlessly understandable by the spectators. It is better to talk in a recognizable language than the untried language.
- **Be Brief:** The speaker should follow a direct and straightforward method. A brief speech will convey a better impression on the audience than a lengthy speech.
Sincerity of Approach: The speaker should show sincerity towards the audience to win their confidence and faith.
- **Importance of Accuracy:** The given information should be accurate. If the audience find a wrong information, they may not accept the accurate part of the speech.

- **Avoid ironic Language:** A good speaker should always avoid the use of ironic Language.
- **Choice of Words:** A speaker should increase the vocabulary and word power deliberately. The freshness and newness of words at right place right time should help the speaker to develop confidence.
- **Use of Humour:** Humour is an essential part of a speech if it used in appropriate place as spontaneously and sparingly.

8. Verbal Communication

It is a type through a written message. It is usually formal and follows strict rules of grammar. It is also used for communication between two friends and at the same time used for filling the applications. It can also pictorial or symbol based and does not involve spoken language.

8.1 Reading

“It is the good reader makes a good book” said R.W.Emerson. Reading is an important skill in communication. Good reading is listening in action, giving time and thoughtful attending the reading material and remaining alive to all the possibilities it suggests. . Helping the student teachers to read carefully and usefully is significant.

8.2 Writing

Writing is an art. For developing such an art, one must collect information, analyze it and the present it with their own views. Words have definite and exact meanings. Effective communication depends upon learning these definite and exact meanings and putting them into practical use. The meaning of a word changes depending upon the occasion. Writing is for others to read and understand. The problem of communication is much greater in writing than speaking. When speaking, one can watch others expressions and adjust the speech accordingly. But in writing, one cannot find others expressions and doubt. The whole message must be ascertainable from the written words alone.

8.2.1 Rules for effective Writing

- i. The writer should have the knowledge about the audience, so that one can highlight the important points.
- ii. It should be totally productive, objective and winning arguments.
- iii. Write in paragraphs with subtitles.
- iv. Prefer the familiar, concrete, simple and short words.
- v. Make the writing interesting, selective and in short paragraphs.
- vi. Clear writing begins in the mind.
- vii. Follow the elements of writing as structure, layout, content, style, diction and flow.
- viii. Remember that writing clearly, simply and understandably is a demanding skill. It takes a lot of hard work to master

9. Implication Of Communication For Engineers And Student Engineers

The policy for communications with 7C's (clear and concise along with concrete, correct, coherent, complete, and courteous). The development of student engineers depend on their placement after completion of their studies. Their Communication strengthens their social status and focuses on appropriate subject knowledge, personal profile and prospects. They are the future techno designers. Having vided knowledge without discipline is worth nothing. Persuasive communication with concrete subject knowledge will lead your profile keep on upgrading. Competition in engineering market is so jeopardize .Every academic year the number of unemployed engineers are getting increased due to unconvincing knowledge of communication despite having strong subject knowledge. Expressing the learned subject is more difficult in reason with unhealthy communication. All the engineering students should be trained with Communication lab and by following various methods to strengthen their confidence.

10. Engineering students and teachers

The existing world entirely is to be determined by the massive growing technology. Technology is another important factor to survey the ordinary life. Therefore there is a huge expectation from the competitors and the student customers to be well in communication. By this, the learners understand and analyze the subject and reliable learning materials effectively. The engineering institutions should focus on effective communication of the learners and teachers. There is a conflict between outdated teaching method and contemporary methods. The outdated method says to attend all lectures and reading all material to obtain knowledge whereas contemporary method is focusing on knowledge through the chases of the technical observations

and outcomes. Another seal of contemporary teaching approach is focusing on entering to the competitive job market. Smart class rooms are designed to gain involvement with communication to grasp the next stages of life. The standing of emergent communication skills in engineering accomplishments cannot be undervalued. The overall aim of engineering education can be observed as providing the future engineers to develop skills, attitude and innovative knowledge include in the idea of technical learning. Communication strengthens their skills in decision making and suggesting effective solutions

11. Barricades in Communication

In any communication, there are at least two sets of desired purposes. The purpose from the communicator's point of view and from the receiver's point of view. When the communication purpose of the source and the receiver are complementary, communication can continue. If it is incompatible, communication breaks down. There are six major barriers in communication.

- i. **Ineffective Environment:** The environment created by the communicator influences his effectiveness. The cultural, educational, occupational and other personality differences would affect his effectiveness of communication.
- ii. **Inaccurate Symbols and Efforts:** The gestures, language may affect the communication. Lack of preparation and organization also may affect effective communication
- iii. **Incompleteness of Communication:** If the sender makes assumptions on the context makes incompleteness of the communication.
- iv. **Transmission of Message:** The proper channels of physical distortion, technical problems, handling media and liable constrains may lack the communication.
- v. **Problems Related to the Receiver:** Lack of attention and interest, lack of knowledge, attitude towards the context, physical fitness, and emotions may lack the communication.

Mobility of persons and profession and its impact on lifestyle affects communication. Education, expanded enormously, largely in response to demographic change. Teacher education is directed away from its traditional concern with the liberal education of undergraduates. The new developments in the world of teacher education closely implied by and affected by globalization, quality assessment, quality assurance and accreditation and recognition of qualifications.

Throughout the world, the concept of lifelong learning has gained currency as a strategy for pursuing the knowledge and skills that are needed to survive in a rapidly changing world. In terms of education and training, this means that studying has become an ongoing process and that learning and work-related activities are no longer seen as separate activities.

12. Strategies for Emerging Communication

The new era allocates innovative provocation and responsibilities on the contemporary engineers. To attain your goal, engineering students/teachers communication growth is entrenched within the vision and mission of engineering. Education has recognized the succeeding strategies:

The practice of multimedia, featuring audio, visual animation effects comes in full play in endorsing activities and creativities of the engineering student's and teacher's effects in all classes

- Shape volume/critical mass with an opinion to progress in Students certain targeted abilities, information and approaches. Work collaboratively with associates of the academicians to pledge teaching and learning involvements of high quality. Design and implement of some framework to develop their skills. Encourage them with self confidence in suggesting solutions and making decisions promote the learning and research access in innovation to handle the critical pressure with sound communication
- Sustenance and teamwork with prevailing amenities and programme initiatives with provision and established student/teacher engineers communication skill.
- As a final point, focus in listening actually and pay overall attention to grasp the communication with interpreting

13. Conclusion

The attitude of Engineers relies with values of moral, team work duties, connectivity; patience listening and mutual understandings should distillate in growing with sound communication. The engineers may be students, teachers, industrialists or entrepreneurs are

exposing their skills with convincing communication. Despite having robust subject knowledge, their communication on their field brands them to position with their reputation.

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