# PROMINENCE OF SOFT SKILLS AND COMMUNICATION SKILLS ON ENGINEERING STUDENTS FOR CARRIER GROWTH

### N. Rama Devi*, Meka Srinivasa Rao**,Gowrisankar Kalakoti***,V.Sesha Srinivas****

* Department of English, KKR & KSR Institute of Technology and Science Vinjanampadu, Vatticherukuru Mandal, Guntur, Andhra pradesh-522017.

** Department of Chemistry, R V R & J C College of Engineering, Chowdavaram, Guntur, Andhra Pradesh – 522019

***,****Department of Information Technology , R V R & J C College of Engineering, Chowdavaram, Guntur, Andhra Pradesh – 522019

Author for correspondence: N. Rama Dvi
Department of English, KKR & KSR Institute of Technology and Sciences, Vinjanampadu, Vatticherukuru Mandal, Guntur,  Andhra pradesh-522017.
E-mail: lokshith@gmail.comPh.No: 7075251241.

## ABSTRACT:

Soft  skills and communication skills  refer  to  a collection  of  personal  grades,  habits, perspective  and  social  graces  that  make  someone a  good employee and compatible to  work. There are three types of skills viz communication, hard and soft skill. Soft skills and communication skills are important for professional development, maintaining Intellectual Property Rights and effective Communication. Soft skills include Inter personal and Personal characteristic that enhance an individual's interactions, job performance and career prospects. There are many key soft skills that need to be applied in work place .Hence Soft skills and communion skills training should begin for a person when they are students, to perform efficiently in their academic environment as well as in their future workplace. Mediation analyses suggested that an increase in soft skills met cognition led to an increase in self-efficacy, which led, in turn, to an increase in adaptive performance. Theoretical and practical implications are discussed, as well as limitations.

**Keywords:**  Soft skill; Communication skills; Met cognition; Hard skill; Intellectual Property Rights; Soft skill training; ; professional training

## INTRODUCTION

Having knowledge, i.e. itself is not enough; we need to communicate it to others effectively. In fact effective communication is one of the keys to success. By successfully getting our message across, we convey our thoughts and ideas effectively. The message is the information that we want to communicate. It is essential to be technically sound, but we should also have the ability to express and communicate our ideas clearly and effectively to others in the simplest possible manner. Effective communication and soft skills not only improve our relationships with others, but they also improve our efficiency. We have learnt in earlier chapters what communication is and how messages can be communicated through various technical skills (also called hard skills),

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*726*

like electronic word processing/presentation, the Internet, etc., and a few more will be discussed in the next unit on Web Publishing Technologies. In this chapter we discuss what soft skills are and how these could be used for effective communication in the context of computer/IT mediated communication.

## WHAT ARE SOFT SKILLS

Soft or social skills (also called non-technical skills) are those personal values and interpersonal skills that determine a person's ability to work well with others in a project team. Soft skills are needed to deal with the external world and to work in a collaborative manner with one's colleagues. These skills include effective communication, leadership, and teamwork skills; demonstrating problem solving abilities, initiative, and motivation skills; displaying honesty and strong work ethics. Soft skills play a vital role for academic and professional success; they help us excel in the workplace and their importance cannot be denied in the emerging information or knowledge society. Soft skills are needed to deal with the external world and to work in a collaborative manner with one's colleagues.

## TYPES OF SOFT SKILLS

There are various components that comprise soft skills. Some are inborn such as confidence, friendliness and whether or not someone has a sociable nature, while others are skills that can be taught or improved upon, such as developing effective communication, organization, and social graces. A large number of soft skills are known today. However, a different set of soft skills is required for a specific type/nature of work. For our purpose these may include the following: • communication skills • listening skills • presentation skills • interpersonal skills • team skills • leadership skills • etiquette • cross-cultural skills • language skills, etc. Some of these are discussed in subsequent paragraphs.

## HOW TO DEVELOP SOFT SKILLS?

Developing soft skills needs practice. These are acquired and experienced on the spot. Soft skills cannot be acquired by merely reading textbooks. The soft skills we gain equip us to excel in our academic/professional life and in our personal life. It is a continuous learning process. Development of soft skills has two parts. One part involves developing attitudes and attributes, and the other part involves fine-tuning communication skills to express attitudes, ideas, and thoughts. Perfect integration of ideas and attitudes with appropriate communication skills in oral, written, and non-verbal areas is necessary for successful work. Attitudes and skills are integral to soft skills. Each one influences and complements the other.

## HARD SKILLS VS SOFT SKILLS

Hard skills are technical procedures/tools related to our field. Examples include work place productivity tools , computer protocols, etc. These skills are typically easy to observe, quantify and measure. By contrast, "soft skills" are typically hard to observe, quantify and measure. Soft skills complement hard skills, which are the technical requirements. Soft skills are as important, if not more important, than traditional hard skills at our work place.

## COMMUNICATION SKILLS

The ability to communicate ideas to others effectively is an absolute essential requirement for our career building. Speaking clearly and coherently will allow effective verbal communication with others. How we speak is more influential to the person who we are communicating with than what we actually say, so we should be careful about our body language and tone of our voice when we are talking. Communication is a two–way process. Listening is therefore an essential skill too. Listening is more than just hearing what is being said. Effective listening encourages others to listen to us and respond to what we say. If communication skills are an area that we feel we could improve on, we should set about identifying ways in which we could develop them. Communication subsumes delegation, listening and presentation.

The ability to present comprehensive written ideas will enable us to put forward professional documentation of our thoughts and is a highly regarded skill. If we write so that misinterpretation is minimized we will find that people are far more receptive to our suggestions. Effective communication skills are something everyone needs to possess. Verbal communication skill includes a one-to-one interaction, presentation/public speaking ability, and good telephonic skills. Written communication would include program writing, report writing, letter writing and e-mail etiquette, etc.

## COMMUNICATION

We know that communication is to get our message across to others clearly and unambiguously and it is most important for our progress. For this, we must understand what our message is, who the audience is and how it will be perceived. We must also weigh-in the circumstances surrounding our communications, such as the situational and cultural context.

## EFFECTIVE COMMUNICATION

Effective communication and interpersonal skills are crucial to the success of an academician as they help him in dealing with people at the emotional level. Effective communication and soft skills not only improve relationships, but also improve efficiency. Communicating effectively is characterized by such things as active listening, using self for messages, conflict management, positive body language, and asking the right questions.

## COMMUNICATION PROCESS

The process of communication involves effort from both the sender and receiver of the message. Else the process can be fraught with error, with messages often misinterpreted by the recipient. When the error is not detected, it can cause tremendous confusion, wasted effort and missed opportunity. Problems with communication can pop-up at every stage of the process. To be an effective communicator and to get our point across without confusion, our goal should be to lessen the frequency of these problems at each stage. This can be done through clear, concise, accurate, and well-planned communications. The communication process consists of basic components like sender, encoding, channel, decoding, receiver, and feedback and the context. Sender As the source of the message, we need to be clear about why we are communicating, and what we want to communicate. We also need to be confident that the information we are communicating is useful and accurate. Encoding this is the process of transferring the information we want to communicate into a form that can be sent and correctly decoded at the other end. One must be careful about cultural issues, mistaken assumptions, missing information, etc.

Different channels have different strengths and weaknesses. For example, it is not effective to give a long list of directions verbally. Decoding Just as successful encoding is a skill, so is successful decoding (for example, taking the time to read a message carefully, or listen actively). Confusion can arise from errors in encoding as well as decoding. This is particularly the case if the decoder does not have enough knowledge to understand the message. Receiver our message is delivered to individual members of our audience. No doubt, we need to be aware of the actions or reactions we hope our message will get from them. We need to bear in mind, though, that each of these individuals enters into the communication process with his or her own ideas and feelings that will undoubtedly influence their understanding of our message, and thereby, their response. To be a successful communicator, we should consider this before delivering our message, and act appropriately.

## COMMUNICATION MODELS

Various communication models have been proposed for the communication process. The simplest of these, the sender-receiver models are discussed here. Basic Communication Model This model is useful when the movement of information across space and through time is a central challenge. Since the model looks at communication from a message point-of-view, its usefulness is limited when the information exchange is so complex that it cannot be isolated into message units. Communication models explain the social process of communication. Each model explains the development of communication while emphasizing different parts of the communication process.

## UNDERSTANDING COMMUNICATION MODELS

Communication models are useful because they provide a visual representation of the complex interactions that occur during communication.

That is, they distill the basic structure of communication into a more digestible form. They also identify the various elements involved and how different parts of the process interact or are interrelated.

The first major model for communication, the Shannon-Weaver model, was developed by Claude Shannon with an introduction by Warren Weaver in 1948.

Both were engineers working for Bell Telephone Labs who were tasked with ensuring that telephone cables and radio waves were operating at maximum efficiency.

In the following decades, the Shannon-Weaver model was adapted and expanded by other communication theorists and scholars.

Today, there are generally accepted to be eight major communication models spread across three distinct categories. We will take a look at these categories and models in the following sections.

## TYPES OF COMMUNICATION

Your communication skills will fall under four categories of communication. Let's take a closer look at each area.

### 1. WRITTEN COMMUNICATION

Writing is one of the more traditional aspects of communication. We often write as part of our job, communicating via email and messenger apps like Slack, as well as in more formal documents, like project reports and white papers.

Conveying information clearly, concisely, and with an accurate tone of voice are all important parts of written communication.

### 2. VERBAL COMMUNICATION

Communicating verbally is how many of us share information in the workplace. This can be informal, such as chatting with coworkers about an upcoming deliverable, or more formal, such as meeting with your manager to discuss your performance.

Taking time to actively listen when someone else is talking is also an important part of verbal communication.

### 3. NON-VERBAL COMMUNICATION

The messages you communicate to others can also take place non-verbally—through your body language, eye contact, and overall demeanor. You can cultivate strong non-verbal communication

by using appropriate facial expressions, nodding, and making good eye contact. Really, verbal communication and body language must be in sync to convey a message clearly.

## 4. VISUAL COMMUNICATION

Lastly, visual communication means using images, graphs, charts, and other non-written means to share information. Often, visuals may accompany a piece of writing or stand alone. In either case, it's a good idea to make sure your visuals are clear and strengthen what you're sharing.

## SOFT SKILLS VS COMMUNICATION SKILLS

Communication soft skills are the tools you use to clearly and effectively converse with others, set expectations, and collaborate on projects. Communication skills are more than speaking or emailing. This umbrella set of interpersonal skills includes everything from collaboration to active listening.

"Soft skills" refer to our emotional intelligence and adaptation. It's an aptitude we possess that is not technical, and that is universally useful. This might be empathy, an ability to listen, work with a team, solve problems, and think creatively. Good soft skills mean I interact with the world with a sense of harmony.

In Spanish there is a saying: "cada cabeza es un mundo" - "every head is its own world." The universe we each exist in is isolated, separate, a tall, vertical architecture built by our experiences and the way we perceive them. Communication skills refer to our ability to build bridges between these worlds, connecting them. It's how we come a bit closer to understanding one another.

Communication skills are a subset of soft skills. Let us take a simple example of a Yoga instructor. Hard skills in his case would be - his knowledge of yoga, etc. Soft skills are - those which cannot be measured directly, ex. the patience he has while training, his communication, his attitude towards students who do not understand easily, is he able to think on his toes and answer questions... As mentioned by Lisa, Communication is a subset of soft skills. Everyone who speaks fluently may not be effective communicators. The requirement for effective communication in each job/role would vary. For example a sales person needs to focus a lot on communication compared to a cashier at a Bank. Importance of soft and communication skills in engineering:

## WHAT ARE ENGINEERING SOFT SKILLS?
Engineering soft skills are non-technical skills that help engineering professionals maintain a good interpersonal relationship with their colleagues, superiors, and clients. Engineers have to interact with other professionals in the course of their work, which requires a great deal of communication and collaboration. Possessing soft skills will facilitate better collaboration and ensure that engineers can perform their duties more effectively. Here's a deep dive into engineering soft skills and how you can improve them.

## HOW TO IMPROVE ENGINEERING SOFT SKILLS

Improving your soft skills as an engineer is important for staying effective at your job. Here are a few practical tips to help you out:

**Learn more**: How to Identify and Develop Soft Skill<u>s</u>

## 1. PRACTICE COMMUNICATION

Communication is a key component of many engineering soft skills, so it's a good idea to practice communication as often as you can. If you're an engineering manager, take it a step further by encouraging communication within your team. Organize catch-up sessions and encourage everyone to give feedback. This will help you develop the skill and also identify any areas where you fall short.

## 2. SEEK OUT TRAINING OPPORTUNITIES

A lot of engineering soft skills can be taught. Explore training opportunities and take advantage of them when you find any. More and more companies are beginning to organize workshops and seminars through their learning and development or HR departments. Take advantage of these to improve your soft skills. Alternatively, you can explore online courses to develop your presentation, negotiation, or business communication skills.

## 3. CREATE A PLAN FOR EACH DAY

Creating a plan helps you focus on the most important tasks for each day so that you can achieve your goals. With a plan, you can allot time to certain tasks, structure your projects, and create more realistic timelines. This is great technique for improving your time management, communication, and for managing your stress levels.

## ENGINEERING SOFT SKILLS IN THE WORKPLACE

These tips will help you with your engineering soft skills in the workplace:

**REMAIN COMMITTED TO THE JOB**: Staying committed will help you remember what is important and keep you focused to achieve your goals.

**PRACTICE ACTIVE LISTENING:**

It's not just about hearing what the other person said. Listening actively enables you to focus on what the other person said and understanding them completely. It includes paying attention to their body language as well. This is a great way to build your relationships with others and develop a reputation as a good communicator.

**BE RESPECTFUL OF EVERYONE**:

No matter their rank or background, every individual deserves respect. Respect fosters tolerance and mutual understanding, which can improve collaboration and communication.

**HOW TO HIGHLIGHT ENGINEERING SOFT SKILLS**

Having the required soft skills for engineering is not always enough, you also need to be able to show prospective employers that you can use them to achieve excellent results on the job. These tips will show you how.

**ENGINEERING SOFT SKILLS FOR RESUME AND COVER LETTER**

Ensure that your resume is well-written and free of grammatical errors. It's useful to include a clearly labeled skill section on your resume. Go over the job description carefully and match the skills required to what is on your resume. It's also important to demonstrate how you used those skills in the experience section of your resume. Cover letters can offer a bit more information about your personality and offer more flexibility for you to describe your skills and expertise. Describe how you have used these skills in previous employment and why they make you the best candidate for the position.

**ENGINEERING SOFT SKILLS FOR THE JOB INTERVIEW**

An interview is a great opportunity to demonstrate soft skills like communication. Be mindful of your interviewer's body language and find creative ways to respond to the questions asked — don't use generic responses. This will help you stand out. Knowing what soft skills are in demand for engineers is a great first step to equipping yourself and preparing to bag the job of your dreams. For more excellent career advice, explore our blog and you'll find ways to succeed in your profession.

## WHY ARE ENGINEERING COMMUNICATION SKILLS IMPORTANT?

Beyond strong technical knowledge, engineering employers place a high value on other <u>critical</u> engineering competencies such as personal effectiveness and academic and workplace skills. Engineers with strong communication skills can position themselves for leadership roles, using those skills to effectively manage and motivate teams and train individuals in lean development processes or new software programs. Additionally, engineers are responsible for inspiring confidence in their ideas; this requires communication skills to sell their products or designs. Engineering communication skills, including active listening, negotiation, and clarity, are useful in key engineering design stages. Below are a few examples of the benefits of having strong communication skills

## ENGINEERING COMMUNICATION SKILLS

From coming up with a brilliant design for a new building or road to developing innovative products or software, engineers' work touches every aspect of our lives. In addition to the technical skills necessary to design, test, and build things, successful engineers must also have the ability to interact with others to get their designs from concept to development. Examples of essential communication skills for engineers include the following:

## WRITING REPORTS

Engineers produce reports to convey technical information and findings, provide details about processes and objectives, and describe design choices and products. People who read these reports can be technically minded or nontechnical business leaders. Keeping various audiences in mind, engineers must write their reports in clear language accessible to all. For help with grammar and brevity, engineers can take advantage of tools such as <u>Grammarly</u> and the Hemingway App.

## PUBLIC SPEAKING

Hiring managers seeking engineering leadership candidates look for the ability to clearly present objectives, data, conclusions, and recommendations. Effective public communication and presentation skills enable engineers to share their findings, plans, and projects with peers who understand technical language as well as with potential clients in business meetings. Therefore, their public speaking skills must include the ability to translate technical concepts into simple language in an engaging, confident manner.

## LISTENING

Equal in importance to oral and written communication skills is the ability to listen. This skill is essential for engineers to understand problems and issues clearly. Strong leaders listen to workers throughout an organization, to understand where problems lie and hear their solutions; to clients, to understand their needs and guidelines; and to supervisors, to understand their expectations.

## LEADERSHIP

Strong communication skills are essential for engineering management roles. Communication skills are vital to these key aspects of engineering management:

Communicating processes and goals to engineers and teams that include technical and nontechnical members

Coordinating activities with engineers, managers, and others, which can occur at construction or manufacturing sites, in laboratories and testing centers, or in offices proposing budgets to secure funding for projects? Optimizing resources, which includes asking company executives for equipment or staff working with contractors in other divisions or companies Hiring new staff members

Conducting LEAD and SELF for Engineering Students at KITS Engineering College(KKR & KSR) , Guntur, and Andhra Pradesh.

LEAD: (LEARN ENGLISH AND DRIVE)

The first English organization in our college. Students take part in the interactive program to get rid of the fear of stage, where all the maters and mentors support the students to do the activities, with the support of the faculty coordinator. The ultimate goal is make English coltgeid language in the college. It was experimented second year B.Tech. Students where it has become successful and speaking in English has to become propagate in entire college that motivates many students.

Model picture how to conduct LEAD for Second year Engineering Students.

## SELF: (SPEACK ENGLISH LANGUAGE FLUENTLY)

Student's organization to enhance the professional attitude that arguments self- confidence and gear up the fluency at English language. This organization on established on motive to develop soft skills. Third B.Tech. Students participate in activities to enrich their proficiency of English. This helps to motivate them to meet corporate needs.

*Eur. Chem. Bull.* **2023**,*12(3), 726-738*

*736*

Model picture how to conduct SELF for Third year Engineering Students.

**CONCLUSION**

In conclusion, soft skills are critical for engineers to succeed in their profession. Soft skills complement technical skills and enhance the overall performance of engineers in their roles. Employers are increasingly looking for engineers who possess excellent communication, leadership, problem-solving, and teamwork skills, among others. Over the past twenty three weeks I have written a series of posts on Soft Skills: their development, the competencies they represent and the importance soft skills have in the workplace (or life in general, for that matter). I still like the following definition of Soft Skills because it is straight forward and concise: *" '*Soft

*Eur. Chem. Bull. 2023,12(3), 726-738*

*737*

Skills' is a catch-all term referring to various behaviors that help people work and socialize well with others. In short, they are the good manners and personality traits needed to get along with others and build positive relationships. Unlike hard skills, which include a person's technical skill set and ability to perform certain functional tasks, soft Skills are broadly applicable across job titles and industries. It's often said that hard skills will get you an interview but you need soft skills to get — and keep— the job

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