WORKSHOP REPORT ON

LOGICAL THINKING & PROBLEM SOLVING

Event name: Logical Thinking and Problem Solving

Date of event: 30th May, 2024

Venue: Architecture Seminar Hall, KSSEM

Number of participants: 80

Targeted Audience: Faculties of Various Departments.

The department of Electronics and Communication Engineering, KSSEM, had organized a workshop on, "Logical Thinking and Problem Solving" on 30th May, 2024at 9 AM IST.

The workshop was conducted by **Dr. S R Subramanya,** President and CEO Exskillence, **Dr K Rama Narasimha**, Principal, KSSEM, **Dr.K Senthil Babu**, HoD of ECE and HoDs of Various Departments graced the event with their presence. The workshop was attended by faculty members of various departments.

Discussion:

Logical thinking skills are essential to the health of any workplace environment. People at any level can be called and expected to resolve problems that are inherent to the area of their expertise. Therefore, the more logical thinking skills are utilized in a workplace; the better will be the decision-making process with fewer mistakes.

Logical thinking skills helps us improve ourselves in many ways, for example, by forcing intellectual self-improvement because you consider hard facts even when you are assessing your own performance. They also help you become a better team player because you are unlikely to let you emotions, such as your ego, cloud your judgment.

They also tend to increase your capability of being creative because you tend to make as many logical connections, across subjects, as possible. All these improvements on an individual level tend to translate to organizational success eventually.

How to improve your logical thinking skills

Following are some tips that shall prove very useful in improving your logical thinking skills:

- **Develop the habit of questioning**. Hone your questioning skills and use them everywhere. Whatever information you have collected, whether facts and figures or simply assumptions, verify it all. Check your sources of information and investigate every piece of information that you find even slightly questionable. You must check everything for their authenticity before you begin to evaluate the worth of any such information you have gathered.
- **Adjust your perspective first.** Understand the biases you may have as a human being by determining what exactly they are how they may affect the way you deal with information. Be flexible enough to look at a problem from different perspectives even if they contradict your long-held beliefs. Accept with an open mind and entertain any new information, without any personal biases that you may have.
- **Learn to put it all together effectively**. Try to organize your thoughts whether by writing or by using mind-mapping to help you clarify them first. Examine all information you have, figure out relationships among those bits of collected information, and determine which ones are of highest value. Weigh all your options once you have put them in front of you, and then make a decision or come up with a solution.

Photo Gallery

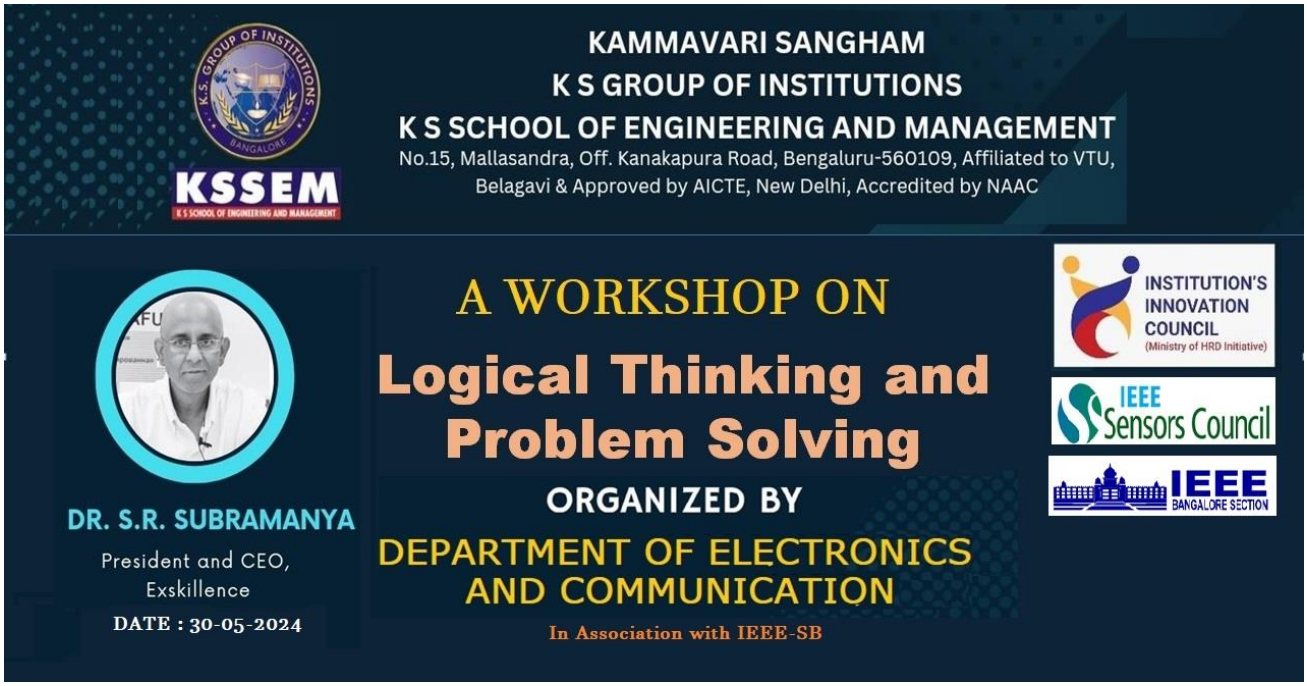

Fig 1. Workshop Broucher

Fig 2. Speaker addressing the Audience

Fig 3. Participants in the Event

Problem solving is the act of defining a problem; determining the cause of the problem; identifying, prioritizing, and selecting alternatives for a solution; and implementing a solution.

Define the problem

Diagnose the situation so that your focus is on the problem, not just its symptoms. Helpful problem-solving techniques include using flowcharts to identify the expected steps of a process and cause-and-effect diagrams to define and analyze root causes.

The sections below help explain key problem-solving steps. These steps support the involvement of interested parties, the use of factual information, comparison of expectations to reality, and a focus on root causes of a problem. You should begin by:

- Reviewing and documenting how processes currently work (i.e., who does what, with what information, using what tools, communicating with what organizations and individuals, in what time frame, using what format).
- Evaluating the possible impact of new tools and revised policies in the development of your "what should be" model.

Generate alternative solutions

Postpone the selection of one solution until several problem-solving alternatives have been proposed. Considering multiple alternatives can significantly enhance the value of your ideal solution. Once you have decided on the "what should be" model, this target standard becomes the basis for developing a road map for investigating alternatives. Brainstorming and team problem-solving techniques are both useful tools in this stage of problem solving.

Many alternative solutions to the problem should be generated before final evaluation. A common mistake in problem solving is that alternatives are evaluated as they are proposed, so the first acceptable solution is chosen, even if it’s not the best fit. If we focus on trying to get the results we want, we miss the potential for learning something new that will allow for real improvement in the problem-solving process.

Co-ordinator **Signature of HOD, ECE**