CRITICAL AND CREATIVE THINKING

Critical thinking is the ability to clearly and logically consider information that is presented to us. Creative thinking is about generating new, novel, or useful ideas. The great innovators combine critical thinking and creative thinking.

Creative thinking (a companion to critical thinking) is an invaluable skill for college students. It's important because it helps you look at problems and situations from a fresh perspective. You see problems as interesting opportunities, and you challenge assumptions and suspend judgment. You don't give up easily. Some of the best examples of creative thinking skills may include: lateral-thinking, visual reading, out-of-the-box thinking, copywriting, artistic creativity, problem-solving, analytical mind, and divergent thinking. By practicing critical thinking, we are allowing ourselves not only to solve problems, but also come up with new and creative ideas to do so. Critical thinking allows us to analyse these ideas and adjust them accordingly.

Generally speaking, creativity is associated with generating ideas, while critical thinking is associated with judging them. It is fundamentally creative in the sense that it aims to produce something new: an insight, an argument, a new synthesis of ideas or information, a new level of understanding.
CREATIVE THINKING VS CRITICAL THINKING

- Critical thinking is the ability to clearly and logically consider information that is presented to us. Creative thinking is about generating new, novel, or useful ideas. The great innovators combine critical thinking and creative thinking. Old world perspectives with new world ideas. They are the complementary skills which you use as different stages when trying to solve a problem or forming a judgment about something.

- Creative Thinking and Critical Thinking are two expressions that show the difference between them when it comes to their inner meanings. Creative Thinking is going beyond the limitations and being original and fresh in one's ideas. Critical Thinking, on the other hand, is more evaluative in nature and analyses a particular thing.

No matter what process you chose, the ultimate goal is to generate ideas that are unique, useful and worthy of further elaboration.
IMPORTANCE OF CRITICAL AND CREATIVE THINKING

Creativity goes hand in hand with innovation. Creativity improves the process of solving problems.

Both creative and critical thinking are essential in the success of a business. Both ways of thinking require elaboration on the problem, which leads to problem solving. Creative thinking can be used to elaborate on the initial problem in order to come up with new solutions.

The reason why innovation benefits from critical thinking is simple; critical thinking is used when judgment is needed to produce a desired set of valued outcomes. That is why the majority of innovation outcomes reflect incremental improvements built on a foundation of critically thought-out solutions.

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Source
HOW TO IMPROVE CRITICAL THINKING SKILLS

- **Open-mindedness**: Critical thinkers must work to have unbiased thought processes and remain open to more than one point of view.
- **Analysis**: Analyse information to determine its reliability and to understand it well enough to draw further conclusions.
- **Interpretation**: Take time to interpret your analysis, synthesizing, and deciphering the meaning of relevant information.
- **Problem-solving**: Once you analyse and interpret a problem, you can come up with one or more possible solutions.
- **Decision-making**: By making a decisive decision, you come to a conclusion based on the data you have interpreted.
- **Effective communication**: You must be able to convincingly explain your conclusions (and the thought process behind them) to others.
- **Self-improvement**: Good critical thinkers develop positive habits of mind by reflecting on their own personal critical thinking process and looking for ways to improve it.
Create your own “Three Ifs”: Many good innovators take an existing object and ask clever questions to twist the very concept of it and make it new.
1. What would happen if I change it (the object/ system/ social relationship, etc)?
2. What would I change or improve about this object if I wanted to use it in 10 years?
3. What would I do if I had a one-million-dollar investment to improve it?

Practice dreaming: The greatest paradox is that creative thinking is not necessarily the product of IQ or enlightenment via the proverbial apple falling on your head. It is a matter of regularly training your imagination, practicing your powers of observation and dreaming, big or small.

Make time for cohesive creative thinking: Every textbook on creativity affirms the importance of setting aside clearly defined time for creative thinking and innovation. Allocate time – it might be an hour per day or per week – in which to exercise creative thinking about something specific.

Learn to pitch your ideas: One of the most important innovation skills is the ability to present a very short and clear description of a new idea (two to three sentences – like shouting through the closing door of an elevator) and to make a short presentation (two to three minutes – what is called an “elevator pitch”)

Bounce ideas off others: Even a great innovator needs people around her or him to discuss – or “bounce” – new creative ideas and innovations. The important asset to add to your innovation skills, is the ability to be a valuable team player, capable of bouncing ideas to the next level.
To conclude - Critical and creative thinking are two inseparable sides and educational goals everywhere. Both are necessary skills in everyday life. To be applied depends on the ability and confidence of the lecturer to apply in the form lab in the laboratory. They both play an important role in every aspect of our life and as we learn to implement them for solving problems and stay focused in what we do.

“Education is not the learning of facts, but the training of the mind to think.” – Albert Einstein

Resources:
- Article on the Importance of Creative Thinking
- Video on Critical and Creative Thinking Tool
- Article on Importance of Critical Thinking
- Video on Differences between Creative & Critical Thinking
- Ted Talk on Creative and Critical Thinking
In the new cohort, currently in the 2nd year (1438), 699 students were mapped to the Enguru English program and 739 scholars to the Hello English program. This commenced on August 10th.

Under the Campus to Corporate "Skills Training Program" supported by Capgemini, 1460 scholars gave the Midline test. Based on these scores, 483 students are in the Hi-touch English program by eAge Tutors, 713 in the Coursera program, and 30 in the Skill Lync program. A batch of 100 students from Computer Science & IT streams will do the IBM Skill build program from October 10th.

This year, the 2nd year students in Law (18) and Pharma (52) cohorts are also enrolled in the English program with Enguru that started on 31st August.

FLY (Finding the Leader in You) Program in partnership with CMI and IIT-Gandhinagar

The 12-days workshop was conducted in September with a batch of 34 students. This comprises 2nd year Engineering scholars. This workshop is conducted by CMI - Competitive Mindset Institute Inc and designed to teach noncognitive skills for the personality and character development of students.

Soft Skill Training programs and webinars for Medical FFE scholars

Qmed - Medical Literature searching course for research and study is going on for 66 Medical scholars.

Medical Webinar - 13th Medical Webinar (25th September) - “Research in MBBS: translation versus mere research” conducted by Dr. Sakir Ahmed - 231 participants
From the 2019-20 batch of 1023 Engineering scholars, 93% (953) of students are placed, where 723 have secured jobs and 230 have opted for higher studies. 7% (70) of students are currently seeking employment.

From the 2020-21 graduating batch of 890 Engineering students, 82% (736) is placed; 519 have secured jobs and 217 have opted for higher studies while 19% students (154) are seeking employment.

From the 2021-22 graduating batch of 1256 Engineering students (current final year), 29% (361) are placed; 239 have secured jobs and 122 have opted for higher studies. The remaining 895 students are starting campus interviews from September 2021.

FFE is thankful to its corporate partners Geberit Plumbing Technology India Private Limited, O9 Solutions, Altimetrik India Pvt. Limited, Capgemini TechnologyServices India Limited, KPMG Assurance, and Consulting Services LLP, TraneTechnologies, Ingersoll Rand for offering Placement opportunities to FFE’s batch of 2019-20, 2020-21 & 2021-22.

Below are toppers in the Coursera training program. They have been issued with gift vouchers, based on their performance. Congratulations to all of you!

### Toppers in the Coursera Program (August)

- Abhishek R- PES University, Bangalore
- Chethan B Mali- BMS College of Engineering, Bangalore
- Kaushal Dhanani- Pandit Deendayal Petroleum University, Gandhinagar
- Jeevan B M- National Institute of Technology Suratkal
- Omprakash Singh- Visvesvaraya National Institute of Technology, Nagpur
- Tamendra Naveen V- National Institute of Technology Durgapur
- Gannu Venkata Girish Chandra- AU College of Engineering, Vishakhapatnam
- Sakthi Namasivayam- Madras Institute of Technology, Chennai
- Karthikeyan K- College of Engineering, Anna University, Chennai
- Naveen V - Madras Institute of Technology, Chennai

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