

Unit 5- Creativity and Critical Thinking

- Creativity is the ability to think about a task or a problem in a new or different way, or the ability to use the imagination to generate new ideas. Creativity is a valuable workplace skill because it can be a useful tool for developing new ideas, increasing efficiency and devising solutions to complex problems.
- Creativity enables one to solve complex problems or find interesting ways to approach tasks. A creative person will look at things from a unique perspective.
- There are several kinds of creative skills that one can practice to become more creative in the workplace. Used in combination, they can be effective in helping an individual think differently about a problem or a task.
- Some of the major characteristics of a creative person are:-
 - 1) Challenge Status Quo
 - 2) Avoid Assumptions
 - 3) Are naturally curious
 - 4) Always explore all possibilities
 - 5) Have vivid imagination
 - 6) Think of the future
 - 7) Don't believe in an ultimate idea
 - 8) Never think anything impossible
 - 9) Like taking risks
 - 10) Can adapt to changing circumstances
 - 11) Can connect seemingly disparate events
 - 12) Are visual thinkers
 - 13) Can identify patterns
 - 14) Look beyond the first 'right idea'
 - 15) Energetic and Focused
 - 16) Realistic and Imaginative
 - 17) Asking multiple questions
 - 18) Making personal observations
 - 19) Engaging in various networking skills
 - 20) Applying the ideas into experimentation

Methods to Acquire Creativity:

1. Fluency- Fluency is all about generating a lot of different ideas. It is a valuable skill to practice because when you have many different ideas, you have more options and are therefore more likely to find more viable solutions to your problem. In addition, often one idea leads to another, so by generating many ideas, you are allowing that process to flow naturally. Fluency

loosens up the creative wheels. Fluent thinkers can also “hitchhike” on one idea to come up with many more ideas. Fluency therefore means the ability of an individual to come up with different ideas which may also be variations of a single idea.

2. Flexibility- The ability to come up with different ideas, which are not variations of a single idea is flexibility. Flexibility is a bit like fluency in that we are working with ideas, but while fluency is about generating as many ideas as possible, flexibility is about generating ideas that are different from each other. Thinking flexibly is a valuable skill because it allows you to get out of a “thinking rut” in order to come up with a whole new idea. Flexible thinkers are able to flip to alternate sides of an argument, and ultimately build better reasoning because they can see where an opponent is coming from

3. Originality- The word *originality* comes from a Latin root meaning “source.” Originality is the pinnacle of creativity. Originality by definition means producing ideas and products that have not existed before, Originality is the ability to think creatively in an appealing way. Therefore, it is the ability of an individual to not just come up with new ideas but also ideas that have never been thought of before.

4. Curiosity- Curiosity is the desire to know more. It is a powerful motivator for learning and behaviour. Curiosity is the spark that ignites the imagination in the first place. Without curiosity there would be no innovation, no art, no culture, no progress. Curiosity therefore is the quality of an individual where their desire to know more about things is huge and they are not easily satisfied with existing explanations.

5. Brainstorm ideas- Brainstorming sessions can go a long way in generating ideas. It is the process of involving a large group of people and generating immediate ideas based on the topic at hand. These members could have unique insights because they’re coming from different perspectives and may have different ways of approaching the problem from one’s usual methods.

6. Role-play scenarios- It is the process of applying one’s point of thinking in respect to different roles in life. When one acts out different situations and scenarios, one may develop new ways of looking at an issue and come up with potential solutions. The ability to think quickly on feet is also amplified by role playing scenarios.

7. Reframing of the issue- Reframing a problem or situation can help you reinterpret it. When you present the issue in a new way, you’ll open up different possibilities for how people react, feel, and examine the situation, which can ultimately lead to new solutions. Consider alternative meanings, contexts, and perspectives for the situation at hand.

8. Making the most of creative flow- When one becomes completely absorbed in a project to the point at which they’re so fully immersed that they don’t notice other distractions, one is in a state of creative flow. This state is correlated with strong creative performance, meaning one might produce some of your best ideas when they are immersed in it. Creative people make the

most of the insights and ideas they develop while in a state of creative flow, so it can be an important part of one's creative process.

9. Staying open-minded and flexible- One consistent quality of creative people is that they tend not to see boundaries where others might; boundaries only impede innovation. If you're constantly noticing the limitations of what you can do, you won't be able to develop solutions that are off the beaten path. Instead of limiting themselves to what the rules allow, people who are innovative thinkers don't see solutions as limited to what can happen within the confines of rules. Instead, they employ creative problem-solving skills to see the possibilities as virtually limitless.

Critical Thinking: -

- Critical thinking is the ability to think clearly and rationally, understanding the logical connection between ideas. Critical thinking might be described as the ability to engage in reflective and independent thinking. In essence, critical thinking requires the ability to reason. Critical thinking is thinking about things in certain ways so as to arrive at the best possible solution in the circumstances that the thinker is aware of.
- Characteristics of a critical thinker: -
 - 1) Understand the links between ideas.
 - 2) Determine the importance and relevance of arguments and ideas.
 - 3) Recognise, build and appraise arguments.
 - 4) Identify inconsistencies and errors in reasoning.
 - 5) Approach problems in a consistent and systematic way.
 - 6) Reflect on the justification of their own assumptions, beliefs and values.

The Importance of Critical Thinking

- I. **Critical Thinking is a domain-general thinking skill-** The ability to think clearly and rationally is important whatever we choose to do. If you work in education, research, finance, management or the legal profession, then critical thinking is obviously important. But critical thinking skills are not restricted to a particular subject area. Being able to think well and solve problems systematically is an asset for any career.
- II. **Critical Thinking is very important in the new knowledge economy-** The global knowledge economy is driven by information and technology. One has to be able to deal with changes quickly and effectively. The new economy places increasing demands on flexible intellectual skills, and the ability to analyse information and integrate diverse sources of knowledge in solving problems. Good critical thinking promotes such thinking skills, and is very important in the fast-changing workplace.

- III. **Critical Thinking enhances language and presentation skills-** Thinking clearly and systematically can improve the way we express our ideas. In learning how to analyse the logical structure of texts, critical thinking also improves comprehension abilities.
- IV. **Critical Thinking promotes creativity-** To come up with a creative solution to a problem involves not just having new ideas. It must also be the case that the new ideas being generated are useful and relevant to the task at hand. Critical thinking plays a crucial role in evaluating new ideas, selecting the best ones and modifying them if necessary
- V. **Critical Thinking is crucial for self-reflection-** In order to live a meaningful life and to structure our lives accordingly, we need to justify and reflect on our values and decisions. Critical thinking provides the tools for this process of self-evaluation.
- VI. **Critical Thinking is important for decision making process-** Applying critical thinking helps you make decisions that require a lot of thought. Big, life-changing decisions, like whether or not to make a career move, are aided by critical thinking, which encourages you to research and favour objective logic over your initial emotional response.
- VII. **Critical Thinkers are generally much happier-** Critical thinking helps people better understand themselves, their motivations and goals. When you can deduce information to find the most important parts and apply those to your life, you can change your situation and promote personal growth and overall happiness.
- VIII. **Critical Thinking enhances problem solving ability-** Problem-Solving is the key skill required for adapting to changes and facing challenges. This skill helps an individual to avoid making any situation complex and help find a solution to it by using reasoning.
- IX. **Critical Thinking enhances researching skills-** Critical Thinking will refine your researching skills, moreover will help you research accurately by observing, analysing, synthesizing, experimenting with every aspect in detail for a better result.
- X. **Critical Thinking facilitates independence-** Critical Thinking fosters independence. It allows one to identify a problem, analyse the problem, develop ideas all by oneself rather than depending on another's version or line of observation.

Facts Vs. Claim:-

- A **fact** is something that is, that can be proven to exist. It is objective, witnessed to, real and documented. A fact is a fact, regardless of how we feel about it. It is something that could be verifiable in time and space.
- Example: The wall was painted blue in 2016. The fact would certainly be verifiable if the school office files contained a similar shade of blue paint chip, attached to a dated 2016 receipt for blue paint and a painting contractor's 2016 dated invoice marked "Paid in Full."

- A **claim** is a statement about something, what it is or what it can do. It is presumed to be supported by hard evidence, i.e. facts. If not, it is considered an unfounded or baseless claim. A claim can be a personal judgement, an inference, an interpretation of evidence or a point of view.
- Example: The fact the DNA tested on the murder weapon matches the blood type of the defendant means that the defendant could have fired the weapon that killed his wife. **Explanation:** The interpretation that the physical evidence links to the defendant is a claim. The fact supports the claim.

Detecting Bias-

- **Bias** is when a statement reflects a **partiality, preference, or prejudice** for or against a person, object, or idea. Bias is when a writer or speaker uses a selection of facts, choice of words, and the quality and tone of description, to convey a particular feeling or attitude. Its purpose is to convey a certain attitude or point of view toward the subject.
- Biased information tries to change your mind, how you think. Being aware of bias and knowing how to identify, analyse, and assimilate biased information properly is a skill to be treasured. It puts you in charge of how you think instead of the print and media world.

What are some indicators of bias?

- The language of the document is often **extreme**; statements have all or nothing connotations.
- The argument appeals more to the emotions than to logic.
- Things are worded with the intent to oversimplify or over generalize.
- The author wishes to present a limited view of the topic.

Credibility Analysis:

Credibility is defined as the quality or power of inspiring belief. Credible sources, therefore, must be reliable sources that provide information that one can believe to be true. Using evidence that does not come from a credible source of information will not convince your reader/listener that your claim is plausible or even correct. It is therefore the process of identifying whether the source of information is reliable or not.

Knowing Hidden Motive-

An alternative or extrinsic reason for doing something, especially when concealed or when differing from the stated or apparent reason is known as hidden motive. As a critical thinking skill, an individual should try and understand behavioural aspects of others and analyse if they are being sincere in their thought and speech. Unlike physical attributes and nuance, understanding the real agenda behind someone's actions may be quite impossible. Therefore, an individual must use logic and reasoning in situation to assess the presence of any kind of ulterior motive.

Distinguishing between Relevant and Irrelevant Info:-

The ability to identify what information is pertinent to communication and what is not, is an integral part of creative and critical thinking. To distinguish relevant from irrelevant information~ follow these steps:

- Identify the main topic of the material.
- Determine which supporting ideas are directly related to the topic.
- Identify sentences or ideas that do not seem to be related to the main topic.
- Sort through the information you think might not be relevant. Try to connect it to the main topic.
- If you cannot make a connection, then it is probably irrelevant

Valid Reasoning: -

Validity refers to an idea, concept or anything to be logically and factually sound. It should have rationality and reasonability in it. The reasoning behind any act action or situation needs to be validated in order to make it a reality.