Innovation and Creativity

What is innovation
An innovation converts an idea or invention or information into a product or service that provides a better solution to meet new requirements, or satisfies an unarticulated need at an economical cost.

What is creativity
Creativity is the ability to produce something new or provide a solution to a problem with a new method or device, or process.

How to develop creativity and innovation
Create a learning environment that encourages
- questioning,
- patience,
- openness to ideas and opinions,
- trust,
- absence of blaming for failures and mistakes,
- mindfulness of others feelings and emotions.

The Learning Environment should be:
- Learn what is relevant
- Be sincere and dedicated to pursue the objective
- Seek inputs from others
- Be aware of social and environmental issues.
- Use imagination and logic to build mental models
- Encourage the development of critical thinking skills

Critical thinking skills are developed by:
- Effective reasoning
- Systems thinking
- Analyze information, data, hypothesis, alternative suggestions,
- Synthesize and establish relationships and correlations
- Draw conclusions
- Reflect on the entire process

How to create problem solving skills
- Define the nature of the problem
- Determine what is the desired outcome
- Seek all options
- Evaluate relative merit and barriers
- Work in teams with co-operation and collaboration with members
- Identify several possible solutions
- Plan and design an action
- Experiment to carry out the action

- Gather all relevant information, data, information from the experiment/action
- Analyze the outcome
- Check if the desired goal is reached
- Go to the next option
- Reflect on the entire process

How to collaborate
- Develop an attitude of respecting other persons, cultures, beliefs and styles
- Be flexible and willing to work with others
- Learn to make necessary compromise to reach the common goal.
- Share responsibility with others for collaborative work
- Do not blame others for failures
- Appreciate and acknowledge the contributions made by other team members

Developing communication skills
The purpose of communication is to:
- Inform,
- Educate,
- Instruct,
- Build relationships,
- Reconcile,
- Motivate,
- Persuade,
- Lead

Learn to use these tools of communication including digital communication
Understand their effectiveness and impact in different environments
Develop written, oral, virtual (sketches, graphics), and digital language skills
Express thoughts and ideas with clarity, comprehension, and rationally
Develop listening skills to improve understanding, increase information and knowledge,