

## Topic 1: Intelligence and Thinking

### Objectives

**After completing this chapter, you should be able to:-**

- Identify the meaning of intelligence and thinking.
- Distinguish between the different thinking processes.
- Identify the kinds of thinkers.

### Introduction

- "Study without reflection is a waste of time; Reflection without study is dangerous."  
Confucius
- **This Course is about:** learning to think for yourself and being your own person. In short, it's about becoming a creative thinker.
- Creative thinking is an important and vital topic in modern education.
- All educators are interested in teaching creative thinking to their students.
- Many academic departments hope that its professors and instructors will become informed about the strategy of teaching creative thinking skills.
- There is nothing more practical than sound thinking.
- Successfully responding to such questions is the daily work of thinking.
- Poor thinking causes problems, wastes time and energy, causes frustration and pain.
- However, to maximize the quality of your

thinking, you must learn how to become an effective "creator" of your thinking. And to become an effective creator of your thinking, you have to make learning about thinking a priority.

- It's true that some people learn more easily than others, you may have heard the ability to learn can't be acquired, it is something you either have in your genes or you don't.
- That view is wrong, there is another important factor that isn't found in people's genes- the strategies for learning thinking, anyone can master these strategies and make learning easier and more enjoyable.

### What is intelligence?

- There is nothing more practical than sound thinking.
- Intelligence isn't just something we have; it is, more importantly, something we do. People sometimes think that the most intelligent people are walking encyclopedias, who can answer all the questions in class or win all the prizes on game shows.



- But The human mind has another more exciting function-using information to solve problems, resolve issues, and meet everyday challenges in living.
- From this perspective, the human mind is much more than information warehouse.
- It is an idea factory, and the key to its success is a different kind of knowledge, performance knowledge.
- Factual knowledge "knowing about". Performance knowledge is "knowing how", sometimes referred to as "Know-how".

## What is thinking?

- Thinking is a purposeful mental activity that you control.
- Thinking is a conscious activity. Yet the unconscious mind can continue working on a problem after a conscious activity stops, for example, while you sleep.

## Kind of Thinkers.

### There are Three Kinds of Thinkers:

- Naïve, Selfish, Fair-minded.
- Naïve: He/She doesn't care about his/her thinking.
- Selfish: He/She is good at thinking, but he/she is not fair to others.
- Fair-minded: He/she is good at thinking and is fair to others.

## The most important Fair-minded Guidelines

- Using intellectual standards to think better. Here are some of the most important ones:
  - Be clear
  - Be accurate
  - Be relevant
  - Be logical
  - Be fair
- Can you state what you mean?
- Can you give examples?
- Are you sure it's true?
- Is it related to what we are thinking about?
- Does it all fit together?
- Did you consider how your behavior will make others feel?

## Errors of Thinking

- Mine is better thinking.
- Selective Perception.
- Bias.
- Either / or Thinking.
- Generalizations.
- As small children we may have said: "my mommy is prettier than any other mommy".
- Now that we have gotten older, we probably don't express "mine is better thinking".
- Such thinking often occurs in matters that are important to us, such as our race, religion, ethnic group, social class, political party, or philosophy of life. "Mine is better thinking" is natural and often harmless.

- Even so, this kind of thinking creates distance between people.
- To prevent this from happening, remember that opening your mind to ideas from other people can broaden your perspective and lead to fresh insights. Give every idea a fair hearing.



## Topic 2: Creativity

### Objectives:

**After completing this topic, you should be able to:-**

- Identify the Meaning of Creativity.
- Distinguish between The Negative and Positive Attitudes for Creativity.

### Concept of Creativity:

- In fact, we are all creative every day because we are constantly changing the ideas which we hold about the world around us. Creativity does not have to be about developing something new to the world, it is more to do with developing something new to ourselves. When we change ourselves, the world changes with us, both in the way that the world is affected by our changed actions and in the changed way that we experience the world.
- The question now is: “What is Creative Thinking?”

### An Ability:

- A simple definition is that creativity is the ability to imagine or invent something new. Creativity is not the ability to create out of nothing (only Allah can do that), but the ability to generate new ideas by combining, changing, or reapplying existing ideas.
- Creativity is also an attitude: the ability to accept change and newness, a willingness to play with ideas and possibilities, a flexibility of outlook, the habit of enjoying the good, while looking for ways to improve it.

- We are socialized into accepting only a small number of normal things; like chocolate-covered strawberries, for example. The creative person realizes that there are other possibilities, like peanut butter and banana sandwiches.
- Creative people work hard and continually to improve ideas and solutions, by making gradual alterations and refinements to their works.

### Negative Attitudes That Block Creativity:

- **Oh no, a problem:**
  - It can't be done.
  - I can't do it or.
- **There's nothing I can do:**
  - But I'm not creative.
  - What will people think?
- **Oh no, a problem:**
  - The reaction to a problem is often a bigger problem than the problem itself.
  - Many people avoid or deny problems until it's too late, largely because these people have never learned the appropriate emotional, psychological, and practical responses.
  - The happiest people welcome and even seek out problems, meeting them as challenges and opportunities to improve things.
- **It can't be done:**
  - By assuming that something cannot be done or a problem cannot be solved, a person gives the problem a power or strength it didn't have before.
  - And giving up before starting is, of course, self fulfilling.

- But look at the history of solutions and skeptics: man will never fly; rockets will never leave the atmosphere.
- Again, the appropriate attitude is summed up by the statement, "The difficult we do immediately; the impossible takes a little longer."

## I can't do it or

### • There's nothing I can do:

- Some people think "well maybe the problem can be solved by some expert, but not by me because I'm not smart enough, or an engineer."
- Again, though, look at the history of problem solving. Who were the Wright brothers that they could invent an airplane? "Aviation engineers?" No, they were bicycle mechanics. The ball point pen was invented by a printer's proofreader, not a mechanical engineer. A good mind with a positive attitude and some good problem solving skills will go far in solving any problem.

## But I'm not creative:

- Everyone is creative to some extent. Most people are capable of very high levels of creativity; just look at young children when they play and imagine. The problem is that this creativity has been suppressed by education. All you need to do is let it come back to the surface. You will soon discover that you are surprisingly creative.

### • What will people think?

There is strong social pressure to conform and to be ordinary and not creative.

## Here are some overheard examples:

- **Creative Person:** "I like to put water in my orange juice so it's less sweet."
- **Ordinary Person:** "You're weird, you know?"  
**Ordinary Person:** "What are you doing?"
- **Creative Person:** "We're painting our mailbox."
- **Ordinary Person:** "You're crazy."  
**Ordinary Person:** "Why are you going this way? It's longer."
- **Creative Person:** "Because I like the drive."
- **Ordinary Person:** "Did anyone ever tell you you're strange?"

## Positive Attitudes for Creativity:

1. Curiosity.
2. Challenge.
3. A belief that most problems can be solved.
4. The ability to suspend judgment and criticism.
5. Seeing the good in the bad.
6. Problems lead to improvements.
7. A problem can also be a solution.

## Curiosity

- Creative people want to know things--all kinds of things-- just to know them. Knowledge does not require a reason. The question, "Why do you want to know that?" seems strange to the creative person, who is likely to respond, "Because I don't know the answer."
- Knowledge is enjoyable and often useful in strange and unexpected ways. In addition to knowing, creative people want to know why. What are the reasons behind decisions, problems, solutions, events, facts, and so forth? Why this way and not another? And why not try this or that?

## Challenge

- Curious people like to identify and challenge the assumptions behind ideas, proposals, problems, beliefs, and statements. Many assumptions, of course, turn out to be quite necessary and solid, but many others have been assumed unnecessarily, and in breaking out of those assumptions; often comes a new idea, a new path, and a new solution.

## A belief that most problems can be solved

- By faith at first and by experience later on, the creative thinker believes that something can always be done to eliminate or help alleviate almost every problem.
- Problems are solved by a commitment of time and energy, and where this commitment is present, few things are impossible.
- The belief in the solvability of problems is especially useful early on in attacking any problem, because many problems at first seem impossible.
- Those who take on the problem with confidence will be the ones most likely to think through or around the impossibility of the problem.

## The ability to suspend judgment and criticism.

- Many new ideas, because they are new and unfamiliar, seem strange, it is important for the creative thinker to be able to suspend judgment when new ideas are arriving, to have

an optimistic attitude toward ideas in general, and to avoid condemning them with the typical kinds of negative responses like, "That will never work; that's no good; that's impossible," and so forth.

## Seeing the good in the bad.

- Creative thinkers, when faced with poor solutions, don't cast them away. Instead, they ask, "What's good about it?" because there may be something useful even in the worst ideas. And however little that good may be, it might be turned to good effect or made greater.

## Problems lead to improvements.

- Such unexpected and perhaps unwanted problems are not necessarily bad, because they often permit solutions that leave the world better than before the problem arose.

## A problem can also be a solution:

- A fact that one person describes as a problem can sometimes be a solution for someone else.
- Above we noted that creative thinkers can find good ideas in bad solutions.
- Creative thinkers also look at problems and ask, "Is there something good about this problem?"

