



## **EXPLORATION, EXPERIMENTATION AND IMPLEMENTATION: KEYS TO EXISTENCE IN THE 21ST CENTURY**

The Human brain is a storehouse of knowledge. We know about everything that goes on around us. The latest happenings in the international arena, new scientific discoveries, historical archives, thermal activity. We even know about the fundamentals of simple forces such as gravity, magnetism, energy and radioactivity, to complex issues like geospatial mapping, nuclear physics and space science, but, this knowledge is of no substantial use, unless one applies it to create something out of the ordinary.

Today's times demand people who can channelise their knowledge and intellect in a positive way, so as to invent, innovate and create novel things, which will aid human progress.

One's resourcefulness is no longer measured by the weight of one's awareness and information, but by one's capability to analyze and initiate something new with that knowledge.

Let's suppose there are two people working for an engineering company. In the first case, we take a person who knows a lot, has a very high level of awareness and can grasp a lot of concepts without difficulty, knows all about programming, but still lays trust on manuals and follows them, instead of following his own ideas, because he isn't capable of applying them practically. Whereas, another person, who does not have formal knowledge, but excels in its application finally emerges a winner.

Another horde of examples are the legacies of major companies. Why do Apple and Microsoft dominate the IT world? Why are Tesla motors famous throughout the world? Bill Gates, Mark Zuckerberg (Face Book), Steve Jobs are live examples of people who have been college drop outs, but have had faith in themselves, worked on original ideas and thus created vast empires.

The 21st century is the beginning of a new age, an age of knowledge, where ideas metamorphose into economic growth. The meaning of knowledge itself has changed. It is no longer information gathered in books or collected in the minds of experts. Knowledge is a form of energy, which does things and makes things happen. This creative energy is what is desired in people nowadays.

Being creative is about seeing things from different perspectives, application of what one knows to achieve desired results. One needs to think divergently, explore and keep the storehouse of possibilities open, to create.



Exploration, experimentation and implementation are the keys to becoming a worthy citizen. Knowledge then becomes a resource, used to think with, to apply, and to bring about change. But instead of just 'knowing', we need to 'know how', to apply what we have learnt. The world demands creative and thoughtful people who can give humanity something new, something out of the ordinary.

By mid-21st century, illiteracy will not refer to people who are not able to read and write, rather it will refer to people who cannot understand and implement the information they have.

To make sure that today's children become tomorrow's 'thinkers', the educational system around the world needs to be reformed. Instead of explaining the concept and informing the students about its uses, they should be left independent, with an understanding of the principles and then allowed to think and develop its use. This will inculcate the ability to apply the information, and innovate.

Focus should be laid on creating an environment where one is free to experiment on ideas, no matter how small they might be, without being judged on relevance or morality. Innovation then comes easily. In the present times it has become more important to have a vision and the capability to view things through a kaleidoscopic window, to be creative and innovative.

In my opinion three steps make a difference. The first- exploration; Madam Curie's key to success wasn't knowledge, it was her burning desire to know more. She did not, for a long period of time have a laboratory, she used to research for hours with her husband, Pierre, in their work shed. The Second-experimentation. Thomas Alva Edison faced failure a number of times, yet he didn't give up, but continued experimenting, using different types of metals for the filament of the electric bulb. The third, and the most important one- innovation. When the Wright brothers invented the first aircraft, they did not have knowledge about aeronautics. The plane was a brainchild of the application of the principles of physics and mathematics.

One need not have the most exotic resources, but have ideas, visions, to change the world. Putting this in the words of the physicist Albert Einstein- imagination.

**"The true sign of intelligence is not knowledge, but imagination"**

**By Yashi Punia**

Tagore International School, Delhi