# NEED FOR PROBLEM SOLVING ABILITY TO **TEACHERS**

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#### **Abstract**

Education is a great irresistible force; which has taken the entire world in its fold. Every country's huge sum of money is spent on education to equip children fully for taking their rightful place in the civilized world today. Problem solving forms part of thinking. Considered the most complex of all intellectual functions, problem solving has been defined as higher-order cognitive process that requires the modulation and control of more routine or fundamental skills. The teacher is the dynamic leader of a group of pupils in the classroom. As a leader he has to motivate pupils for better learning. He has to guide students in a variety of matters like proper selection of subjects, to wholesome choice of vocation. He has to respect their personality, identify and appreciate their strength and weaknesses and adjust his own attitudes and behavior so that he or she is able to motivate students for hard work. As a teacher he has to help students develop right attitudes towards work. He has to set an example by having the right attitudes to work. He has to inculcate in students the habit of punctuality and regularity. The teacher has to help students organize their work on a systematic basis. He should not impose on students but stand by and intervene as and when necessary. A teacher should bring desirable and constructive changes in students through instruction, example and influence.

## Introduction

Education is a great irresistible force; which has taken the entire world in its fold. Every country's huge sum of money is spent on education to equip children fully for taking their rightful place in the civilized world today. In broader sense, education means the process of development from infancy to maturity. It begins from birth and continues till the end of life. Thus education becomes the sum-total of experiences that the child receives inside the school and outside, through the study of different subjects, through various activities, through the library, the playground and the workshop or through other agencies. Education is the preparation for life through experience. There is a great controversy in regard to the meaning and definition of the term education. Education means "the modification of behaviour". Education

is an activity or a process, which transforms the behaviour of a person from "Instinctive behaviour" to "human behaviour". Thus education has a major role in moulding the ability of a person and forming the character.

# **Problem Solving**

The term problem solving is used in many disciplines, sometimes with different perspectives, and often with different terminologies. It is a mental process in psychology and a computerized process in computer science. Problems can also be classified into two different types i) well-defined and ii) ill-defined from which appropriate solutions are to be made. Well-defined problems have specific goals, clearly defined solution paths, and clear expected solutions. Ill-defined problems are those that do not have clear goals, solution paths, or expected solution. These problems also allow for more initial planning than ill-defined problems. Being able to solve problems sometimes involves dealing with pragmatics and semantics. The ability to understand what the goal of the problem is and what rules could be applied represents the key to solving the problem. Sometimes the problem requires some abstract thinking and coming up with a creative solution.

Problem solving forms part of thinking. Considered the most complex of all intellectual functions, problem solving has been defined as higher-order cognitive process that requires the modulation and control of more routine or fundamental skills (Goldstein and Levin, 1987). It occurs if an organism or an artificial intelligence system does not know how to proceed from a given state to a desired goal state. It is part of the larger problem process that includes problem finding and problem shaping.

## **Barriers to Effective Problem Solving**

There is no easy task in an age of stress and information overload. In the process to deliver, groups commonly get bogged down in a sea of data or fail to tap into existing information that might further their efforts. At the same time, people often develop solutions and action plans that never get fully implemented. Results from these efforts are frequently mediocre and add more complexity and frustration to an already challenging situation. Good solutions will not carry themselves to actual implementation. When adoption and follow through are given short consideration, problem solving efforts fall short of expectations.

#### **Problem Solving Process**

Numerous approaches may be taken when attempting to solve problems. After determining that a problem exists, it is helpful to respond to the following guidelines:

- i) Identify the problem.
- ii) Understand the problem's unique characteristics and the possible outcomes.
- iii) Define the requirements of a possible solution considering the company policies currently in place.
- iv) Identify possible solutions.

- v) Select the best solution.
- vi) Implement the solution, informing the customer of the details and how the customer will be affected.
- vii) Observe and evaluate the solution's impact.

## **Dimensions of Problem Solving Ability**

# **Organizational Environment**

Organizational environments are composed of forces or institutions surrounding an organization that affect performance, operations and resources. It includes all of the elements that exist outside of the organization's boundaries and have the potential to affect a portion or all of the organization.

#### **Team Work**

Teamwork is often a crucial part of a business, as it is often necessary for colleagues to work well together, trying their best in any circumstance. Teamwork means that people will try to cooperate, using their individual skills and providing constructive feedback, despite any personal conflict between individuals.

# **Teaching Strategies**

Institutions of higher learning across the nation are responding to political, economic, social and technological pressures to be more responsive to students' needs and more concerned about how well students are prepared to assume future societal roles. Faculty are already feeling the pressure to lecture less, to make learning environments more interactive, to integrate technology into the learning experience, and to use collaborative learning strategies when appropriate.

## **Meeting Student's Needs**

Students enter classrooms with different abilities, learning styles, and personalities. Educators are mandated to see that all students meet the standards of our district and state. Through the use of differentiated instruction strategies, educators can meet the needs of all students and help them to meet and exceed the established standards.

#### Attitude

Attitude can be formed from a person's past and present. Our attitudes are shaped by our experiences, and as we experience more, our attitudes can change. Attitudes are a way of thinking, and they shape how we relate to the world both in work and outside of work.

# Challenges

A teacher's first year on the job is often difficult. Schools can help new teachers improve their skills more quickly, thereby keeping them in the profession and raising student achievement.

# **Working with Student's Parents**

The relationships of teacher with their students and their parents are extremely important. Children appreciate teachers who treat them like human beings. Parents appreciate a teacher who cares enough to include them in their child's education.

## **Need for Problem Solving Ability to Teachers**

Of all the different factors which influence the quality of education and its contribution to national development, the quality, competence and character of teachers are undoubtedly the most significant. Nothing is more important than securing a sufficient supply of high quality recruits to the teaching profession, providing them with the best possible preparation and creating satisfactory conditions of work in which they can be fully effective (Report of the Education Commission 1964-66). The teacher is the soul of the school. A teacher is a friend and guide to his pupils, who suggests and inspires and gets lessons learnt, not by force but by creating interest among students and motivating them to learning. He must adopt the profession of teaching with dedication and spirit of service. The success of the teacher is measured on the basis of the achievement of the aims of education.

The teacher is the dynamic leader of a group of pupils in the classroom. As a leader he has to motivate pupils for better learning. He has to guide students in a variety of matters like proper selection of subjects, to wholesome choice of vocation. He has to respect their personality, identify and appreciate their strength and weaknesses and adjust his own attitudes and behavior so that he or she is able to motivate students for hard work. As a teacher he has to help students develop right attitudes towards work. He has to set an example by having the right attitudes to work. He has to inculcate in students the habit of punctuality and regularity. The teacher has to help students organize their work on a systematic basis. He should not impose on students but stand by and intervene as and when necessary. A teacher should bring desirable and constructive changes in students through instruction, example and influence.

As a teacher, one should be ready to face various conflicts within the school and his role is to resolve as many of those as possible and should not expect a smooth sailing at the workplace since there is different personnel in the organization-principal, teachers, administrative and non-teaching staff and pupils. This may lead to conflict of interest, ideas, beliefs and ego, between teacher and teacher, principal and teachers, teacher and students, student and student, teacher and parent, teacher and other staff. It depends on the individual teacher as to how, with his insight and imagination, he tackles the situation and resolves the conflicts.

#### Conclusion

Organizations should strive to develop a comprehensive problem solving and implementation strategy that increases the speed and likelihood of resolution and allows everyone within the organization to assume successful problem solving responsibilities. This problem solving strategy should be balanced and flexible and include multiple structured method options so as to increase effectiveness and speed to resolution. Effective problem solvers appreciate the importance of having organized approaches for problem solving. Orderly methods contribute positively to efficient and timely problem resolution and increase the odds of a successful implementation. Without positive interpersonal interaction, problem solving is usually fruitless. Together, high performing people and an effective process combine to create a problem solving environment that produces results.

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