

Lateral thinking of prospective teachers essay sample



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INTRODUCTION

Thinking involves the deeply cerebral manipulation of information, as when we form concepts, engage in problem solving, reason and make decisions. Thinking is a higher cognitive function and the analysis of thinking processes is part of cognitive psychology. Thinking is a complex mental process by the electro-chemical reactions in the brain. We cannot explain or understand the thinking process easily. Thinking process is unique in a person who deals with it effectively according to his goals, plans, ends and desires. It includes concepts and processes such as cognition, sentience, consciousness, idea, and imagination.

Martin Luther King Jr., (1947) said “ The function of education, therefore, is to teach one to think intensively and to think critically. The complete education gives one not only power of concentration, but worthy objectives upon which to concentrate. The broad education will, therefore, transmit to one not only the accumulated knowledge of the race but also the accumulated experience of social living”. Albert Einstein (1954) said “ Wisdom is not a product of schooling but of the lifelong attempt to acquire it.” Thinking is needed for the very survival of nations. Many of the major problems that face mankind must be met by new modes of thinking and acting. There are several ways of thinking. A person can possess any kind of thinking process in order to cope up with an environment and society. But, when we face fast changing trends, fierce competition, and the need to work miracles despite tight budgets-we need lateral thinking.

LATERAL THINKING

Edward de Bono is the pioneer of lateral thinking. Edward de Bono invented <https://assignbuster.com/lateral-thinking-of-prospective-teachers-essay-sample/>

the term “ lateral thinking” in 1967. It was first written up in a book called “ The use of Lateral Thinking” (Jonathan Cape, London). Edward de Bono divides thinking into two methods. He calls one ‘ vertical thinking’ that is, using the processes of logic, the traditional-historical method. He calls the other ‘ lateral thinking’ which involves disrupting an apparent sequence and arriving at the solution from another angle. A way of thinking that seeks a solution to an intractable problem through unorthodox methods or elements that would normally be ignored by logical thinking. Lateral thinking is a creative skill from which all people can benefit enormously. Lateral thinking is quite distinct from vertical thinking, which is the traditional type of thinking. In vertical thinking one moves forward by sequential steps, each of which must be justified. The distinction between the two sorts of thinking is sharp. For instance, in lateral thinking one uses information not for its own sake but for its effect. In lateral thinking one may have to be wrong at some stage in order to achieve a correct solution; in vertical thinking (logic or mathematics) this would be impossible. In lateral thinking one may deliberately seek out irrelevant information; in vertical thinking one selects out only what is relevant.

Lateral thinking is not a substitute for vertical thinking. Both are required. They are complementary. Lateral thinking is generative. Vertical thinking is selective. Like logical thinking lateral thinking is a way of using the mind. It is a habit of mind and an attitude of mind. Vertical thinking is concerned with proving or developing concept patterns. Lateral thinking is concerned with restructuring such patterns (insight) and provoking new ones (creativity). Lateral and vertical thinking are complementary. Skill in the both is

necessary. Yet the emphasis in education has always been exclusively on vertical thinking. The book ' Lateral Thinking' by Edward de Bono achieved the classic status in the field of lateral thinking. This book is very useful in learning to apply creativity more deliberately. The lateral thinking book is useful in three ways (1) for teachers, to teach lateral thinking to students. Edward de Bono suggests setting aside a regular time for teaching (2) for parents to teach their children: In present schooling, mostly vertical thinking is taught.

It may take some time for lateral thinking to become part of the curriculum. Meanwhile, parents can take up the teaching of lateral thinking to their children themselves. (3) for individuals who want to apply lateral thinking in their career of life. Quoting from research, Edward de Bono describes the mechanism of mind. Mind communicates using patterns. These preset patterns are good in terms of faster reactions; however they tend to make us rigid. Lateral thinking is an effort to break these patterns and bring creativity. Edward de Bono says Lateral thinking is closely related to insight, creativity and humour. All four processes have the same basis. But whereas insight, creativity and humour can only be prayed for, lateral thinking is a more deliberate process. It is as definite a way of using the mind as logical thinking – but a very different way. Insight, creativity and humour are so elusive because the mind is so efficient. This self-organizing, self-maximizing, memory system is very good at creating patterns and that is the effectiveness of mind. Once the patterns are formed it becomes possible to recognize them, to react to them, to use them. As the patterns are used they become ever more firmly established.

But inseparable from the great usefulness of a patterning system are certain limitations. In such a system it is easy to combine patterns or to add to them but it is extremely difficult to restructure them for the patterns control attention. Lateral thinking is closely related to creativity. But whereas creativity is too often only the description of a result, lateral thinking is the description of a process. One can only admire a result but one can learn to use a process. Lateral thinking is concerned with the generation of new ideas. Insight and humour both involve the restructuring of patterns. Creativity also involves restructuring but with more emphasis on the escape from restricting patterns. Lateral thinking involves restructuring, escape and the provocation of new patterns. Liberation from old ideas and the stimulation of new ones are twin aspects of lateral thinking. The need for lateral thinking arises from the limitations of the behavior of mind as a self-maximizing memory system. There are three practical situations which encourage the use of lateral thinking and they are: description, problem solving and design. Lateral thinking comprises of various intertwined dimensions such as description, problem solving, humour and insight.

Description:

An object or a situation may be described by someone in a particular way and by someone else in a different way. There can be as many descriptions as there are points of view. Some descriptions may be more useful than others; some descriptions may be more complete than others. But there is no one description which is correct, leaving all the others to be wrong. That is why description is an easy way of showing how something can be looked at in different ways. It is also an easy way of practicing the ability to

generate alternative ways of looking at something. Furthermore when one learns to generate alternative points of view, one is ready to appreciate the validity of other people's points of view. Problem Solving:

A problem is not just an artificially arranged difficulty that is only to be found in textbooks. A problem is simply the difference between what one has and what one wants. Any question poses a problem. Generating and solving problems is the basis of forward thinking and progress. If description is a matter of looking back to see what one has then problem solving is a matter of looking forward to see what one can get. Humour

According to brain researchers, three parts of the brain light up when you laugh at a joke. There is the thinking part that helps you get the joke, the area that controls the movements of your muscles and an emotional area that makes you feel good. What makes something funny isn't as clearly understood, but humor researcher John Morreall believes laughter is a response to incongruities or stories that disobey conventional expectations.

Insight

The Oxford American Dictionary defines insight as the capacity to gain an accurate and deep intuitive understanding of a person or thing. Simple meaning of insight is " The ability to see and understand the truth about people or situation". Insight generally means seeing below the surface of things. Insight is brought about by alterations in pattern sequence brought about by provocative stimulation and lateral thinking provides such stimulation. Insight occurs when an impasse is broken by changing that representation. Representations concerning the goal state are changed via a

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mechanism called 'constraint relaxation' (Ohlsson, 1992). Lateral thinking deals with insight restructuring. Insight is represented by distinct spectral, spatial, and temporal patterns of neural activity related to presolution cognitive processes that are intrinsic to the problem itself but not exclusively to one's subjective assessment of insight.

OBJECTIVES

1. To find out the level of lateral thinking of prospective teachers. 2. To find out whether there is any significant difference between male and female prospective teachers in their description, humour, insight, problem solving and lateral thinking. 3. To find out whether there is any significant difference between rural and urban prospective teachers in their description, humour, insight, problem solving and lateral thinking. 4. To find out whether there is any significant difference between computer knowing and unknowing prospective teachers in their description, humour, insight, problem solving and lateral thinking. 5. To find out whether there is any significant difference among Hindu, Christian and Islam prospective teachers in their description, humour, insight, problem solving and lateral thinking. 6. To find out whether there is any significant difference among subject of language, arts and science prospective teachers in their description, humour, insight, problem solving and lateral thinking. 7. To find out whether there is any significant association between family monthly income of the prospective teachers and their description, humour, insight, problem solving and lateral thinking.

HYPOTHESES

1. There is no significant difference between male and female prospective teachers in their description, humour, insight, problem solving and lateral

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thinking. 2. There is no significant difference between rural and urban prospective teachers in their description, humour, insight, problem solving and lateral thinking. 3. There is no significant difference between computer knowing and unknowing prospective teachers in their description, humour, insight, problem solving and lateral thinking. 4. There is no significant difference among Hindu, Christian and Islam prospective teachers in their description, humour, insight, problem solving and lateral thinking. 5. There is no significant difference among subject of language, arts and science prospective teachers in their description, humour, insight, problem solving and lateral thinking. 6. There is no significant association between family monthly income of the prospective teachers and their description, humour, insight, problem solving and lateral thinking.

POPULATION AND SAMPLE

The Population for the investigation is the prospective teachers studying in colleges of education in Tirunelveli, Thoothukudi and Kanyakumari Districts. The Investigator selected 1345 prospective teachers studying in colleges of education from three districts namely Tirunelveli, Thoothukudi and Kanyakumari by the stratified random sampling technique.

METHODS AND TOOL DESIGN

This study has been carried out in the colleges of education in Tirunelveli, Thoothukudi and Kanyakumari Districts of Tamilnadu, India. The method followed for the investigation is the survey method. The stratified random sampling technique was followed. The Lateral Thinking Questionnaire (LTQ) tool was administered for collecting data. The LTQ is validated by the

investigator. For validating the LTQ item discrimination index and Item <https://assignbuster.com/lateral-thinking-of-prospective-teachers-essay-sample/>

difficulty index were calculated. The test-retest method used to establish the reliability co-efficient for the tool which is 0. 791. Thus a total of 47 items with 4 dimensions namely description, humour, insight and problem solving were selected for the final tool. For analyzing the data percentile analysis, ' t' test, ANOVA and correlation analysis were used as the statistical technique in the SPSS package.