

## CREATIVITY AND INTELLIGENCE

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**Abstract:** Times back, there was a time when creativity was considered be as a result of higher degree of general intelligence. Advancement of time, extensive research and widened knowledge has established that creative abilities possessed by an individual can be distinguished from his general intelligence. In addition, there was a belief that students with higher IQ are naturally creative, which may not be true always. Teachers should clearly understand that creativity and intelligence though have a relationship to certain extent can be relatively distinct from one another. Intelligence in the form of knowledge and skills can function as a supporting backdrop for creativity. Teaching in the school should successfully develop the intellectual capabilities of the children and at the same time promote an enduring environment that nurtures their creativity. Understanding the relationship between creativity and intelligence, identifying the creativity existing among students and taking suitable measures to nurture creativity should be one main motive behind our school education. The present paper explains the various types of intelligence, throws light on the relationship between creativity and intelligence, identification of creativity in students and emphasizes on mental factors fostering and enhancing natural creativity.

**Key words:** Creativity, intelligence, IQ, extensive research, intellectual capabilities, enduring environment

### Introduction :-

Creativity is one of the highly valued human ability and is the primary dynamism behind all human creations. This human quality springs into action and thought from the innermost recesses of human vision. It is always valued as an expensive gift from god, which can strongly influence different spheres of human activity. Today, creative education is gaining greater significance in all schools because it is sensed as the most productive from of education capable of promoting human advancement.

Teachers should awaken from their conventional, rigid and enclosed teaching methods, and renovate it for fostering creativity by favourably invoking and responding to their creative responses. Everyone at one or any level can become creative, and can come out with creative outputs. For 'creativity promotion' to become an important objective of the school education, teachers have a vital responsibility, and can be brought into effect by applying the 'task of effort' to three main areas.

The three main areas of importance are:

- Invoking creative responses in students by implementing creative teaching.
- Responding effectively to the creative responses of the students and nurturing it for greater benefits.
- Sustaining an environment that provides chances for imagination and creative thinking.

### Types of Intelligence:-

Intelligence is the ability to think and reason, to solve problems and to form concepts. Intellectual development depends on the genetic make up of the brain and on the qualitative opportunities obtained from the environment. The intellectual development greatly decides the child's ability to cope with the high demands of this sophisticated and competitive society. Like other human qualities, it matures with growth, and if students get more stimulation and opportunities to develop their intellectual capacity, it will advance. Careful analysis shows that there are students who are not cleverer than others, but are found to be really creative. Psychologists have mentioned about seven different types of intelligence.

- **Logical:- mathematical:** Ability to recognize, manipulate, reason and apply logical, numerical and mathematical elements.
- **Linguistic:- verbal:** Reading and writing abilities, and responding to the characteristics of words and expressing the thoughts.
- **Musical:- rhythmic:** Recognizing and responding to rhythms of sound, music and pitch with an appreciation for music.
- **Visual:- spatial:** Ability to make and understand visual-spatial representation, pictures and putting meaning to what is seen.
- **Bodily:- kinesthetic:** Ability to control body movements according to the need of situations and improve the motor co-ordination.
- **Interpersonal:- social:** Controlling and regulating the words and action for co-operating with others and influencing others.
- **Intrapersonal:-self:** Working well with self and improving one's qualities.

### Relationship Between Creativity And Intelligence:-

Intelligence can be considered as the ability to explore more and wider within an established mental context, while creativity is the ability of the brain to go beyond the established context, discover innovative solutions, and arrive at the problems from a new angle. Such an attempt will change or broaden the context. An investigation conducted by Wallach and Kogan identifies students into four groups. Their investigations convey a clear relationship between intelligence and creativity. The four groups are:

**High Creativity- High Intelligence:-** This group of students has a high degree of intelligence along with a bundle of creative talents and original ideas. Their creative responses may be due to their greater intelligence. Along with their higher intellectual capacity, when they invest curiosity and imagination, they generally come up with productive creativity.

**High Creativity-Low Intelligence:-** These children are the most neglected. Blocking all their creative responses, they are sometimes labeled as ‘dull’ by their teachers. When their creativity does not get an acceptance, then naturally they begin to experience dejection, and the felt inner conflict can make them express their anger. However if they get teachers who will value their creativity, appreciate and upholds their creative ideas, and then definitely they can contribute.

**Low Creativity-High Intelligence:-** Students belonging to this group generally show narrow and focused attention directed only towards academic achievements. With their greater intelligence, they excel in academic activities. Sometimes due to their addiction to academics, they don't spare time for imagination and creative thinking. Since they always strive for academic excellence, any academic failure will become more painful to them. In their efforts for academic excellence, which has to be highly appreciated, sadly the chances for any creative outputs are too low.

**Low Creativity-Low Intelligence:-** This group of children need more care and affection from teachers. Mainly due to the intellectual inabilities and difficulties experienced by them. They feel inferior. They are perplexed often and usually express defensive manoeuvres and shows psychosomatic symptoms like passivity. Child-like behaviours prevails for a longer period of time. Constant motivation and encouragement can improve their learning efforts and practical works.

### Identification Of Creativity In Students:-

The diverse form of creativity that is expressed knowingly or unknowingly must be identified and suitably nurtured to magnify their potential and contributions. Identification of their creative potentials can help in encouraging them to take better creative leaps. Specific behaviours that are the roots for creativity can be ascertained when:

- They exhibit diverse interest and have many interesting hobbies.
- Experiments with the interested tasks in different ways and attempts to change them into new findings.
- Shows greater enthusiasm in creative problem-solving and draws out creative solutions to the problems.
- Expresses about their original ideas and attempts to transform them into creative works.
- They show greater curiosity towards the creative works of others and express the felt bursts of inspiration.
- Look at things with new perspectives and are anxious to apply new thoughts and create something novel with self-initiated actions.

- They are more imaginative and think differently and creatively. Albert Einstein says- “I have no special gifts- I am only passionately curious”. Curiosity along with imagination and creative thinking are the influential factors that can cause the flow of creative ideas. Psychologists have mentioned about the four initial stages essential to produce creative thoughts and creative works. Emphasis on these mental factors fosters and enhances the natural creativity:
- **Mental reframing:** Holding interesting or curious thoughts in the mind and reframing the thoughts or problems to make it simpler or systematic.
- **Mental relaxation:** Practicing mental relaxation during which the mind is free of all other thoughts, but relatively focused only on the interested thought or problem. It can give new insight and release creative ideas.
- **Mental illumination:** Sudden snaps of insights and all background thoughts finally break into the consciousness. Such mentally evolved new ideas have to be recorded before they are forgotten.
- **Mental selection:** All the right creative ideas are selected to start and produce some unique and innovative work. Certain creative thoughts can be far beyond the level of transforming it into any form of creative realities. Creative minds should select creative ideas that can be executed into creative piece.

Research of Torrance mainly suggests that teachers should show respect towards student’s imagination, and the unusual ideas expressed. They should feel that their ideas are valued. Students should be made to develop creative thinking as a habit. They should also begin to think as creative person, which becomes a self-stimulating factor that enables them to become creative person. A stimulating environment with lots of encouragement will serve as opportunities that generate many creative ideas. All the best creative ideas that surfaces in the minds of the students should be emboldened to transform them into creative outputs. In an encouraging atmosphere in the school, all new ideas and inventiveness visualized in them should be supported to flourish into high-quality ability and prevent it from being suppressed into less-developed ability.

By breaking the barriers of conditioned thinking and motivating differential thinking, enable them to be involved in pursuits that are more creative. Even encouraging ‘group creativity’ during which creative ideas put forward by a group of students are organized into creative outputs. Praise and reward the creative works of the students so that they get stimulated to scale the higher targets of excellence.

### Conclusion :-

Imagination is that tool that makes an individual to become creative. Great inventors, Scientists, Artists, Writers had incorporated a great deal of imagination and worked on it, thought about it and were able to create masterpieces. This important intellectual tool, which is the main basis for creativity, should find a place in our planned teaching programmes. Creativity itself is a matter of trial and error as well as leaps of imagination. When a teacher is unwilling to accept the creative responses of the students, they feel uneasy and if they are

frequently rejected, then it goes to the sad end of destroying the highly valued creativity. When the creative expressions and approaches are snubbed, it can cause unrepairable damage to him and his high-minded creativity. It is notably important to mention here that a very high degree of attention, recognition, appreciation and guidance must be extended to those with average academic intelligence, but possessing good amount of creative talents. Researching and practicing in the interested areas and materials will generate new insights, open up new perspectives in the mind, that will float the highly valued human ability **CREATIVITY**.

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