



SRI SARADA COLLEGE OF EDUCATION (AUTONOMOUS), SALEM - 16

CRITERIA III : Research and Outreach Activities

KEY INDICATOR 3.1 Resource Mobilisation for Research

*Metric No : 3.1.4. Institution has created an eco-system for
innovation and other initiatives for creation and transfer
of knowledge*

3.1.4(A) Documentary evidence for each of the claims 2020-2021

*Initiatives for innovation and transfer of
knowledge 2020-21*

Sri Sarada College of Education (Autonomous), Salem – 636 016

Re-Accredited by NAAC with "A" Grade (III Cycle)

Affiliated to Tamil Nadu Teachers Education University, Chennai

SRI SARADA COLLEGE OF EDUCATION (AUTONOMOUS)

SALEM -16

S. S. Srinivasan
PRINCIPAL
Sri Sarada College of Education
(Autonomous)
SALEM-636 016

POGIL ACTIVITY - GROUP 8



Salem, Tamil Nadu, India

Karaiswami Muga Mal 'B' Block, Sarada College Rd,
Bupper Market / Car Parking, Salem, Tamil Nadu, 636016
Lat: 11.817075°
Long: 78.148023°
29/09/21 10:32 AM



Salem, Tamil Nadu, India

Karaiswami Muga Mal 'B' Block, Sarada College Rd,
Bupper Market / Car Parking, Salem, Tamil Nadu, 636016
Lat: 11.817075°
Long: 78.148°
27/09/21 12:59 AM



Salem, Tamil Nadu, India

190/778, Sarada College Main Rd, Fairlands,
Tamil Nadu 636016, India
Lat: 11.817075°
Long: 78.147995°
29/09/21 10:34 AM

04/10/2021



GROUP MEMBER ROLES

1 FACILITATOR - CLAREINFANT V.

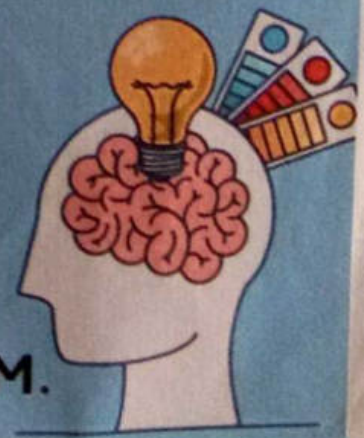
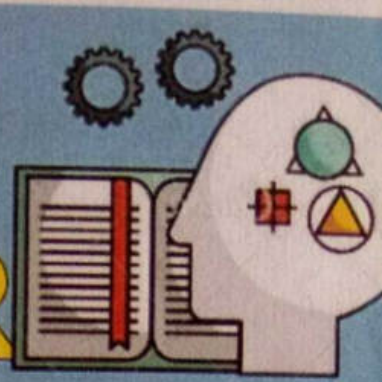
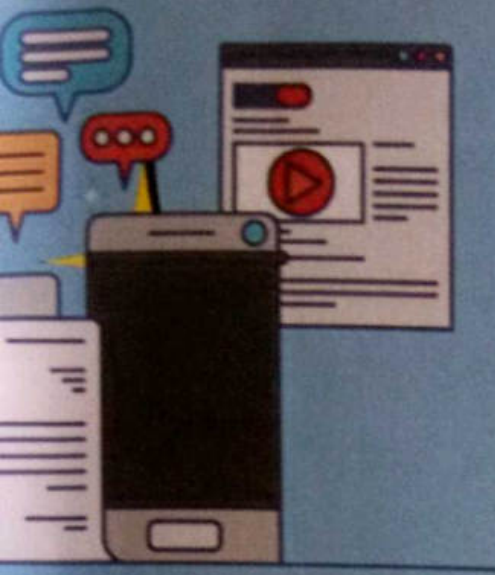
2 READER - MANIMEKALAI S.

3 PRESENTER - PARVIN BANU A.

4 REFLECTOR - VANITHA S.

5 TECHNICIAN - NANDHINI K.

6 ENCOURAGER - SUDHARSHANA M.





Sri Sarada College of Education (Autonomous)

(Reaccredited with 'A' Grade by NAAC)

(AFFILIATED TO TAMIL NADU TEACHERS EDUCATION UNIVERSITY, CHENNAI)

POGIL work sheet : Group VI

Paper: Understanding the learner

Unit: II intelligence and creativity

Date: 24.09.2021

Team members: Reg.No:

Facilitator - 2020E05 [Clara infant.V]
Reader - 2020M19 [Manimekalai.S]
Presenter - 2020P28 [Parvin Banu.A]
Reflector - 2020B44 [Vanitha.S...]
Technician - 2020B37 [Nandhini.k]
Encourager - 2020H49 [Sudhakarshana M]

Problem: High intelligence is no guarantee for creativity: In the light of the above statement discuss the relationship between intelligence and creativity? If you are given responsibility of identifying creative children in your class, what measures would you adapt for the fulfilment of your responsibility. Think on the case given below and suggest strategies to encourage the students to think creatively.

Shalini aged 22 years old, invented a car which could run on solar energy. This was her answer to the growing problem of scarcity of natural resources and pollution. She was very happy and excited with her invention and wanted to show it to her favourite lecturer. On seeing the model, the lecturer said to her, "A good idea, but I don't think you should go ahead with it. You will face a lot of problems as you are a girl. Be practical, that's too futuristic. People won't like it. It will cost too much. Anyway, it is not our problem.

You are the teacher and have to Identify the needs of the student and identify the ways in which the teacher killed the student's creativity.

POGIL ACTIVITY

GROUP VI
DAY - 1

24.09.2021

Absent - Sudharshana M
2020H49

ROLES :

- 1) Facilitator - CLAREINFANT V.
- 2) Reader - MANIMEKALAI S.
- 3) Presenter - PARVIN BANU A.
- 4) Reflector - VANITHA S.
- 5) Technician - NANDHINI K.
- 6) Encourager - SUDHARSHANA M.

As a teacher first we should be happy and proud because of Shalini's innovative idea. Then we should identify the needs of Shalini to continue her innovative work. We should support her in all aspects of her new invention. The needs of Shalini can be identified in many aspects. As the teacher can encourage and motivate Shalini to do further. She can also give support to her financial needs by taking this project to the head of the department and Government officials to support Shalini.

But in case of Shalini's teacher she killed the creativity of Shalini by saying "As a girl you no need to take these kind of creative work". This should not be the case for the student teachers or other teachers. Because each one has their own creativity and the teacher is the responsible one to make the students to think creative.

POGIL ACTIVITY

DAY - 2

GROUP - VI.

Absent - Sudhanshana M

2020H49

27.9.21

INTELLIGENCE :

Intelligence is the ability to think, to learn from experience, to solve problems and to adapt to new situation. Intelligence is important because it has an impact on many human behaviours.

CREATIVITY :

Creativity is a mental and social process involving the generation of new ideas or concepts or new associations of the creative mind between existing ideas or concepts. An alternative conception of creativeness is - that it is the act of making something new.

STRATEGIES TO HELP ENCOURAGE THE STUDENTS

THINK CREATIVELY :

- * Understand and foster the creative environment.
- * Make room for visual reflection
- * Keep the classroom layout flexible
- * Introduce unconventional learning materials.
- * Encourage hands on learning and discussion
- * Don't limit assignments to one format
- * Incorporate humour into your classroom
- * Visualise goals with timelines.
- * Pin up motivational posters.

How Strong Is Your Team?

Day 3

Absent - Sudhakar M

For each item, score your team's performance as: 1 = not very good 2 = needs significant improvement
3 = needs some improvement 4 = adequate 5 = stellar

Write a justification for your score and provide a plan for improving your team's performance.

Item	Score	Justification	Plan
Everyone came prepared.	4	From days of the activity, one person is absent.	So we plan in a way to divide topics.
Everyone participated fully	4	one person is absent.	we divide topics and prepare among ourselves
We encouraged and helped each other.	4	yes, we encouraged and help each other.	Applaud their efforts and encourage them in their pursuits. so we all helped one another.
Everyone asked questions when they didn't understand	4	Some peoples asked questions during activity	we clarified doubts and questions one by one.
Everyone gave clear explanations to each other.	4	Yes, They gave clear explanation to each other.	we divide the topics and asked the students to give explanation
Everyone contributed ideas.	4	From day 2 to 3 one person is absent.	But we plan and gave ideas about how to prepare and present ppt.
We listened to each other.	4	Yes, while one person says the answers others while listening	Different answers were given by our students we listened than
Each person contributed to our success; no one dominated.	4	Yes, Everyone contributed to our success. There was no one dominated.	we divide the roles among us and everyone perfectly played the role.
Everyone understood the material.	4	Yes, everyone understand the material	The reader, read the material and make the students to understand
We completed the assigned work.	4	Till the end of the activity one person is absent	we all separate the absentee role ^{each other} and then completed the assigned work.

Reflection on Learning

Day-3

Absent - Sudhanshu M.

2020449

1. Identify the three most important concepts you learned today.

We learnt ^{about} intelligence and creativity
Then high intelligence is no guarantee for creativity
and then the difference between creativity and
intelligence

2. Why is the concept of Creativity important in Daily life?

The concept of creativity is important
in daily life because every concept and activity of
our routine life is based on creativity. Creativity
gives happiness in our daily tasks

3. Identify a concept from today's activity that you have mastered. Identify one that you understand the least.

High intelligence is no guarantee for creativity.
The high IQ adolescent may be summed up in one sentence
that they may be seen as preferring the anxieties
and delights of safety, the high creativity adolescent
the anxieties and delights of growth.

4. Write a "key question" which, if answered, would help your team better understand some aspect of today's activity. Find the answer to that question.

Which is the most important one intelligence
or creativity?

Both intelligence and creativity is both
the sides of same coin so both the
things were important

5. Explain why and how concept Creativity is useful in solving problem in daily life.

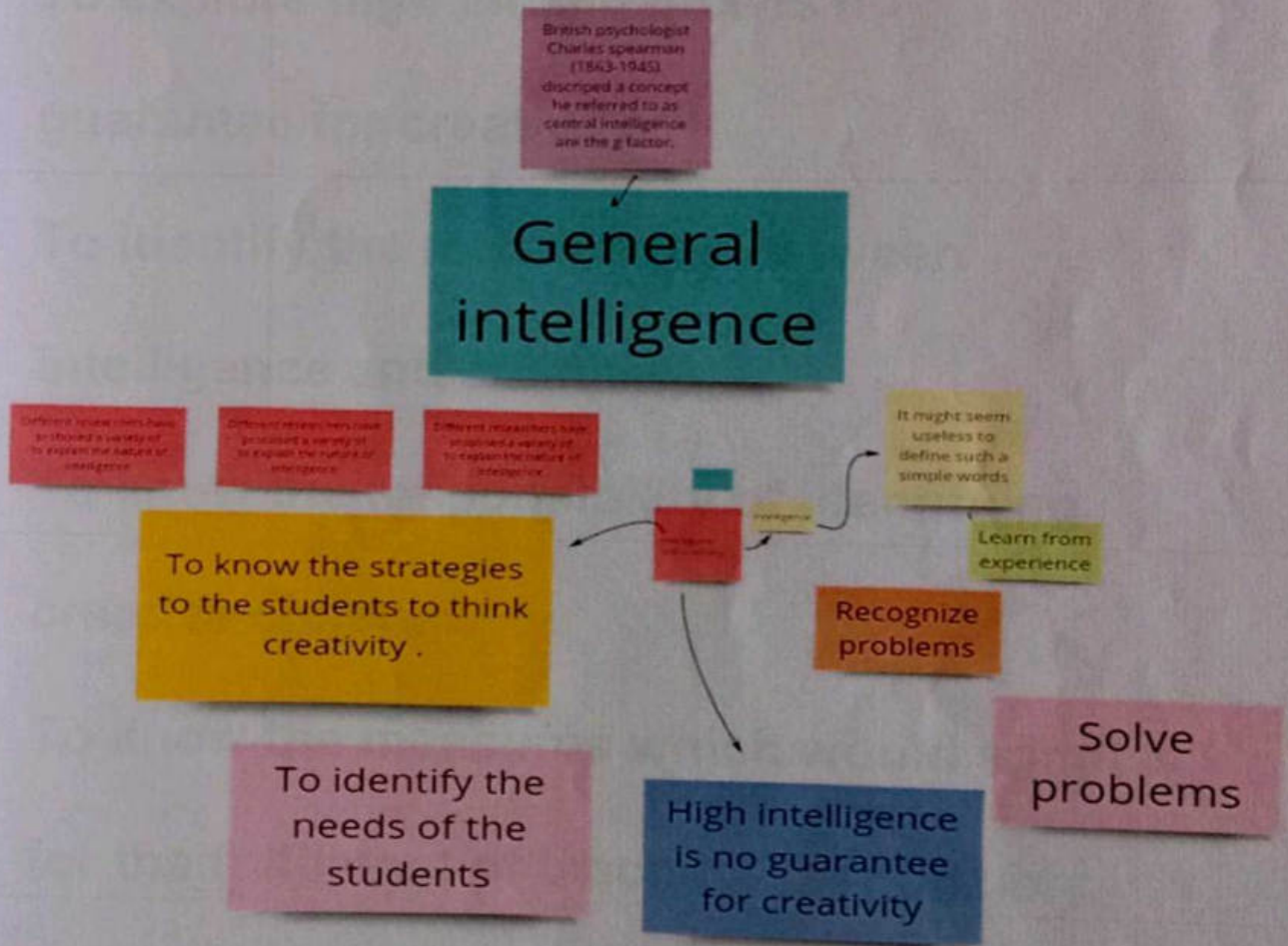
J.P. Guilford clearly distinguishes between the
intellectual operation of divergent thinking. Every
intelligent person may not be creative but a very
high percentage of the creative people possess
intelligence to a high degree.

DAY-4 FINAL PRESENTATION

01.10.2021

On day 4 Final Ogil Presentation was given by our Presenter Parvin Baner A. The presentation was started by manager by introducing each and everyone of our crew members. Then the reader began to read the problem given to us. Then the presenter started the presentation by explaining Creativity and intelligence. Then the creative activity was given to the students by asking them to prepare different shapes out of wheat flour given to them. Each and every student participated enthusiastically and exhibit their creativity. Then our Presenter began the presentation and explain about the relationship between intelligence and Creativity and also she asked some questions related to intelligence and Creativity. Finally the solution is given to our problem and the presenter explain the solution to students. At last we completed our presentation in an successfully. Finally we received feedback from our teacher educator its boost our confidence to do more activities like this Ogil activity.

Concept Map :



OBJECTIVES :

- . To explore high intelligence is no guarantee for creativity.**
- . To identify the relationship between intelligence and creativity.**
- . To know the responsibility of identifying creative children.**
- . To know the measures which would adapt for the fulfilment of teachers responsibly.**
- . To know the strategies to encourage the students to think creatively.**
- . To identify the needs of the student.**

HIGH INTELLIGENCE IS NO GUARANTEE FOR

CREATIVITY :

Creativity is a very precious and unique quality in an individual that enables him to solve complicated problems in different walks of life. The gift of creativity needs to be nurtured right from childhood and should be continued throughout the adulthood.

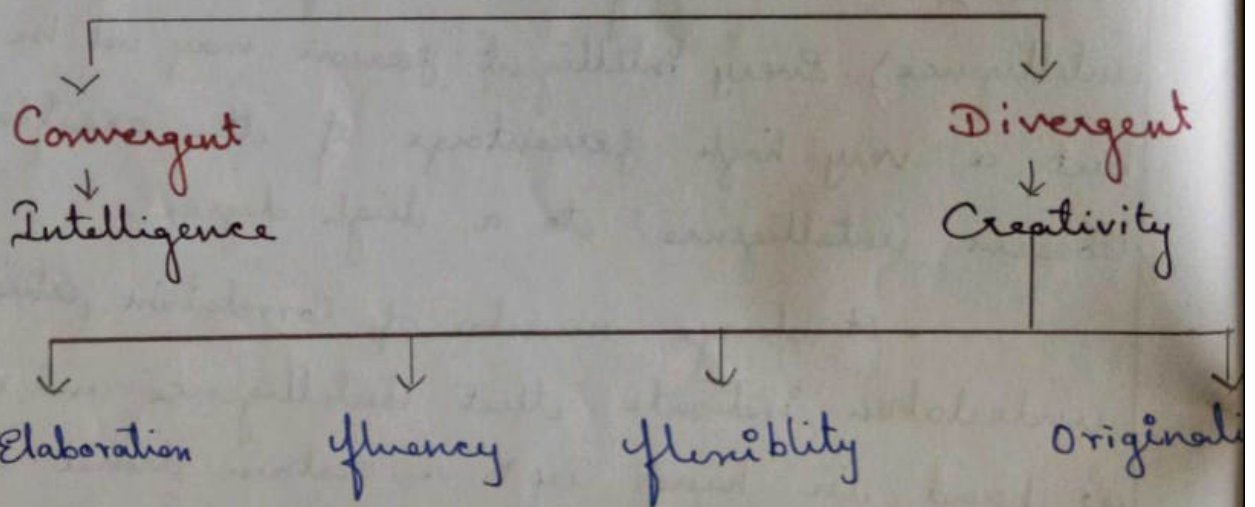
J.P. Guilford clearly distinguishes between the intellectual operation of Divergent thinking (Creative Process) and Convergent thinking (which represents intelligence). Every intelligent person may not be creative but a very high percentage of the creative people possess intelligence to a high degree.

A large number of correlation studies undertaken indicate that intelligence and creativity go hand in hand up to a certain limit and get separated after that limit.

Investigations by Gatzels Jackson on students of a private school in Chicago revealed that the two groups of children i.e. the creative and intelligent were equally superior in academic performance as measured by standard achievement tests.

The highly creative students tended to come from somewhat less well educated homes and experienced greater independence from their mother.

The essence of these differences may be summed up in one sentence the high I.Q. adolescent may be seen as preferring the anxieties and delights of safety but the high creativity adolescent preferring the anxieties and delight of growth.



Thus it is justified that high intelligence is no guarantee for creativity.

The Relationship Between Intelligence and Creativity

* Intelligence is classically defined as "the ability to acquire and utilize knowledge." In testing circumstances, an Intelligence Quotient (IQ) is gauged by one's ability to utilize information gained historically.

* Creativity is the ability to come up with new ideas through a mental process of connecting existing concepts.

* The idea's don't have to be revolutionary they just have to be new for the thinker.

* The relationship between intelligence and creativity is that both of them are functions of the brain that process information to determine a solution or an answer to a problem.

* Intelligence can be measured by the intelligence quotient or IQ. Creativity, on the other hand, is not so easy to measure. Although scientists have found a correlation between those individuals with an IQ of 120 or more having a higher level of creativity, the relationship between intelligence and creativity is more of an overlap of skills and abilities instead of a dependence on one another.

* Guilford's model revealed two of the operations are divergent and convergent production, which depend on creativity and intelligence, respectively to solve a problem.

* Convergent thinking, or intelligence, applies to problems where there's only one solution. Math and science problems typically depend on convergent thinking to be resolved.

* Divergent thinking, also known as creative thinking, takes several different approaches to solving a problem that may or may not have multiple solutions.

* Creativity and intelligence are positively correlated because high ability is a component of creativity. A highly intelligent person may not be creative but the creative persons are definitely high in intelligence.

* Creativity is the ability to produce ideas, objects or problem solutions that are novel, appropriate and useful.

* Intelligence is a subset of creativity.

* Terman found that persons with high IQ were not necessarily creative. The same time, creative ideas could come from persons who did not even one of those identified as gifted. Followed up throughout adult life, had become as well known for creativity in some field.

* Researchers found that high and low levels of creativity can be found in highly intelligent children and also children of average intelligence. The same person can be creative as well as intelligent but it is not necessary that intelligent ones must be creative.

Responsibility of Identifying Creative Children in your class.

We may use both test and non-test techniques for the identification of the creative test. Guilford and Merrifield have developed and the test techniques that measure fluency, flexibility, originality, redefinition and sensitivity to problems.

Gretzels and Jackson have used five different measures of creativity in their research.

i) Word-Association Tests - Students are required to give as many definitions and number of different categories into which they could be placed.

ii) Uses of Things Tests - The student is asked to give as many uses as he can for a common object.

iii) Hidden Shapes Tests - A student is required to find more complex form of figure on card in a simple form.

iv) Three Different Endings - Here a student is required to suggest three different endings to incomplete short fables.

v) Make-up problems - A student is required to make up as many mathematical problems he can on the basis of information given in a complex paragraph.

There are the Minnesota tests of creative thinking comprising non-verbal tasks like picture construction, creative design, circles and squares etc.

- ⇒ consequence test
- ⇒ New relationship tests
- ⇒ Product improvement tests
- ⇒ Picture construction tests
- ⇒ Line figure completion tests
- etc.

ஒரு ஆசிரியர் ஒரு மாணவனின் கைவளைய எவ்வாறு சூதாடி

செய்வாய்

* ஒரு மாணவனின் கைவளைய அளிக்க அவர்களைப் பிரச்சனைகளை அளிக்க அளிக்கான கிராம ஒரு ஆசிரியராக சூதாடி செய்கல்

* சிவனா நன்கு ஊக்கப்படுகிறதில், சிறிதகதிர்ணா உணர்ச்சி பல்வேறு வடிவம் வளிக்க தொடங்கி மார்டின் உதவி (10) சிறி உதவிகள் சிலம் சிவனா உட்படிக்கையை உட்படிக்கிறதாக உதவிகள் செய்கல்.

* பதவியளித்திருக்கிற உட்படி அளிக்க அவர்களைப் பிரச்சனைகளைப் பிரிவு காரணத்தில் அவர்களை அடைவதற்கான சூதாடி சூதாடி செய்கல்

* சிவனின் கைவளைய அளிக்க சிலம் சிவனா சூதாடி செய்கல் கைவளைய சூதாடி செய்கல். ஊக்கப்படுகிறதில்.

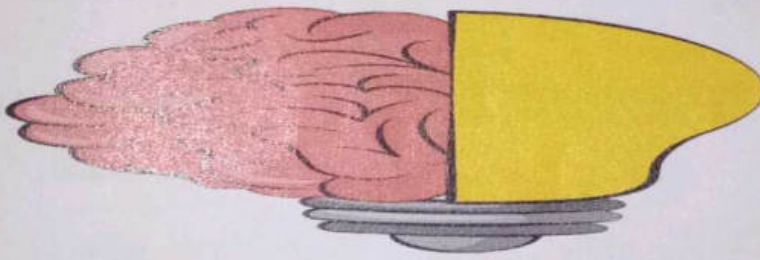
* மன உணர்ச்சியில் கைவளைய மாணவர்களை அளிக்க மாணவர்களை ஊக்கப்படுகிறதில்.

INTELLIGENCE AND CREATIVITY :

Problem: High intelligence is no guarantee for creativity. In the light of the above statement discuss the relationship between intelligence and creativity? If you are given responsibility of identifying creative children in your class, what measures would you adapt for the fulfilment of your responsibility. Think on the case given below and suggest strategies to encourage the students to think creatively.

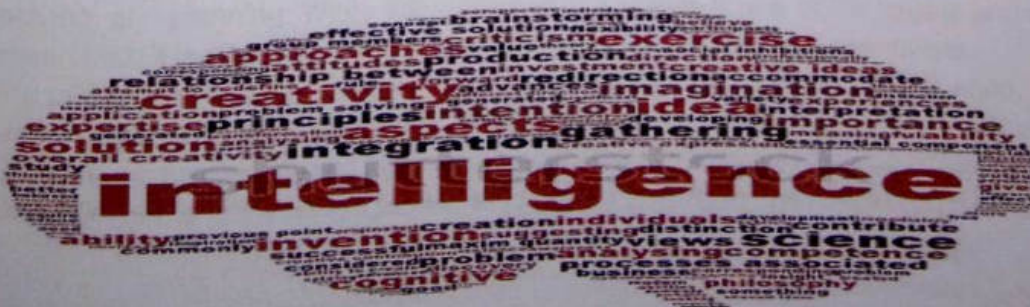
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You are the teacher and have to identify the needs of the student and identify the ways in which the teacher killed the student's creativity.



INTELLIGENCE:

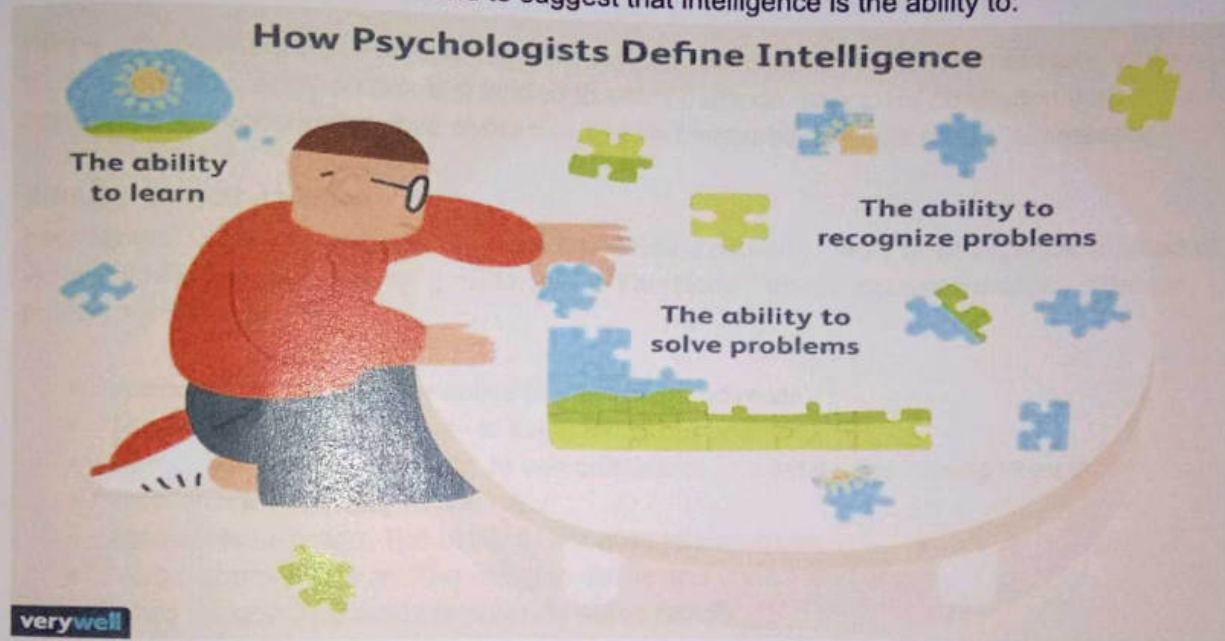
It might seem useless to define such a simple word. After all, we have all heard this word hundreds of times and probably have a general understanding of its meaning. However, the concept of intelligence has been a widely debated topic among members of the psychology community for decades.



Intelligence has been defined in many ways: higher level abilities (such as abstract reasoning, mental representation, problem solving, and decision making), the ability to learn, emotional knowledge, creativity, and adaptation to meet the demands of the environment effectively.

Psychologist Robert Sternberg defined intelligence as "the mental abilities necessary for adaptation to, as well as shaping and selection of, any environmental context.

At various points throughout recent history, researchers have proposed some different definitions of intelligence. While these definitions can vary considerably from one theorist to the next, current conceptualizations tend to suggest that intelligence is the ability to:



Learn from experience: The acquisition, retention, and use of knowledge is an important component of intelligence.

Recognize problems: To put knowledge to use, people must be able to identify possible problems in the environment that need to be addressed.

Solve problems: People must then be able to take what they have learned to come up with a useful solution to a problem they have noticed in the world around them.

Intelligence involves some different mental abilities including logic, reasoning, problem-solving, and planning. While the subject of intelligence is one of the largest and most heavily researched, it is also one of the topics that generate the greatest controversy.

While psychologists often disagree about the definition and causes of intelligence, research on intelligence plays a significant role in many areas. These areas include decisions regarding how much funding should be given to educational programs, the use of testing to screen job applicants, and the use of testing to identify children who need additional academic help.

THEORIES OF INTELLIGENCE:

Different researchers have proposed a variety of theories to explain the nature of intelligence. Here are some of the major theories of intelligence that have emerged during the last 100 years.

GENERAL INTELLIGENCE:

British psychologist Charles Spearman (1863–1945) described a concept he referred to as general intelligence or the g factor. After using a technique known as factor analysis to examine some mental aptitude tests, Spearman concluded that scores on these tests were remarkably similar.

People who performed well on one cognitive test tended to perform well on other tests, while those who scored badly on one test tended to score badly on others. He concluded that intelligence is a general cognitive ability that can be measured and numerically expressed.

Primary Mental Abilities

Psychologist Louis L. Thurstone (1887–1955) offered a differing theory of intelligence. Instead of viewing intelligence as a single, general ability, Thurstone's theory focused on seven different primary mental abilities.

- Associative memory: The ability to memorize and recall
- Numerical ability: The ability to solve arithmetic problems
- Perceptual speed: The ability to see differences and similarities among objects
- Reasoning: The ability to find rules
- Spatial visualization: The ability to visualize relationships
- Verbal comprehension: The ability to define and understand words
- Word fluency: The ability to produce words rapidly

THEORY OF MULTIPLE INTELLIGENCE

One of the more recent ideas to emerge is Howard Gardner's theory of multiple intelligences. Gardner proposed that the traditional idea of intelligence, based on IQ testing, did not fully and accurately depict a person's abilities. His theory proposed eight different intelligences based on skills and abilities that are valued in different cultures:

Bodily-kinesthetic intelligence: The ability to control your body movements and to handle objects skillfully

Interpersonal intelligence: The capacity to detect and respond appropriately to the moods, motivations, and desires of others

Intrapersonal intelligence: The capacity to be self-aware and in tune with inner feelings, values, beliefs, and thinking processes

- Logical-mathematical intelligence: The ability to think conceptually and abstractly, and the capacity to discern logically or numerical patterns
- Musical intelligence: The ability to produce and appreciate rhythm, pitch, and timbre
- Naturalistic intelligence: The ability to recognize and categorize animals, plants, and other objects in nature

- Verbal-linguistic intelligence: Well-developed verbal skills and sensitivity to the sounds, meanings, and rhythms of words
- Visual-spatial intelligence: The capacity to think in images and pictures, to visualize accurately and abstractly

TRIARCHIC THEORY OF INTELLIGENCE:

Psychologist Robert Sternberg defined intelligence as "mental activity directed toward purposive adaptation to, selection, and shaping of real-world environments relevant to one's life."

While he agreed with Gardner that intelligence is much broader than a single, general ability, he suggested that some of Gardner's types of intelligence are better viewed as individual talents. Sternberg proposed what he referred to as "successful intelligence," which involves three different factors:

- Analytical intelligence: Your ability to evaluate information and solve problems
- Creative intelligence: Your ability to come up with new ideas
- Practical intelligence: Your ability to adapt to a changing environment.

Questions About Intelligence Testing

In order to gain a deeper understanding of intelligence and the tests developed to measure this concept, it's important to understand the history of intelligence testing, the research that has been conducted, and the findings that have emerged.

Major questions about intelligence and IQ testing still include:

- Are intelligence tests biased?

Is intelligence a single ability, or does it involve an assortment of multiple skills and abilities?

- Is intelligence inherited, or does the environment play a larger role?
- What do intelligence scores predict, if anything?

To explore these questions, psychologists have conducted a considerable amount of research on the nature, influences, and effects of intelligence.

A Word From Verywell

While there has been considerable debate over the exact nature of intelligence, no definitive conceptualization has emerged. Today, psychologists often account for the many theoretical viewpoints when discussing intelligence and acknowledge that this debate is ongoing.

CREATIVITY :



Creativity is the ability to generate, create, or discover new ideas, solutions, and possibilities. Very creative people often have intense knowledge about something, work on it for years, look at novel solutions, seek out the advice and help of other experts, and take risks.

Creativity is often connected to a person's ability to engage in divergent thinking. Divergent thinking can be described as thinking "outside the box;" it allows an individual to arrive at unique, multiple solutions to a given problem. In contrast, convergent thinking describes the ability to provide a correct or well-established answer or solution to a problem.

Definition :

Creativity is defined as the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others.

Three reasons why people are motivated to be creative:

- need for novel, varied, and complex stimulation
- need to communicate ideas and values
- need to solve problems

Characteristics of the creative personality:

- Creative individuals have a great deal of energy, but they are also often quiet and at rest.
- Creative individuals tend to be smart, yet also naive at the same time.
- Creative individuals have a combination of playfulness and discipline, or responsibility and irresponsibility.
- Creative individuals alternate between imagination and fantasy on one end, and rooted sense of reality at the other.
- Creative people seem to harbor opposite tendencies on the continuum between extroversion and introversion.
- Creative individuals are also remarkable humble and proud at the same time.

- Creative individuals to a certain extent escape rigid gender role stereotyping and have a tendency toward androgyny.
- Generally, creative people are thought to be rebellious and independent.
- Most creative persons are very passionate about their work, yet they can be extremely objective about it as well.
- The openness and sensitivity of creative individuals often exposes them to suffering pain yet also a great deal of enjoyment.

Stages of Creative thinking:

Wallas (1926) has emphasized there are four stages to creative thinking.

Preparation

This stage consists of purposeful study and enquiry in order to collect experience and information needed to solve problem.

- The plan of action is formulated by means of collecting and analyzing the information

Incubation

- This stage is an absence of creative thinking about the problem,
- There is a period of rest when there is no obvious activity and progress.
- It seeks uncover new relationship among familiar facts.

Illumination

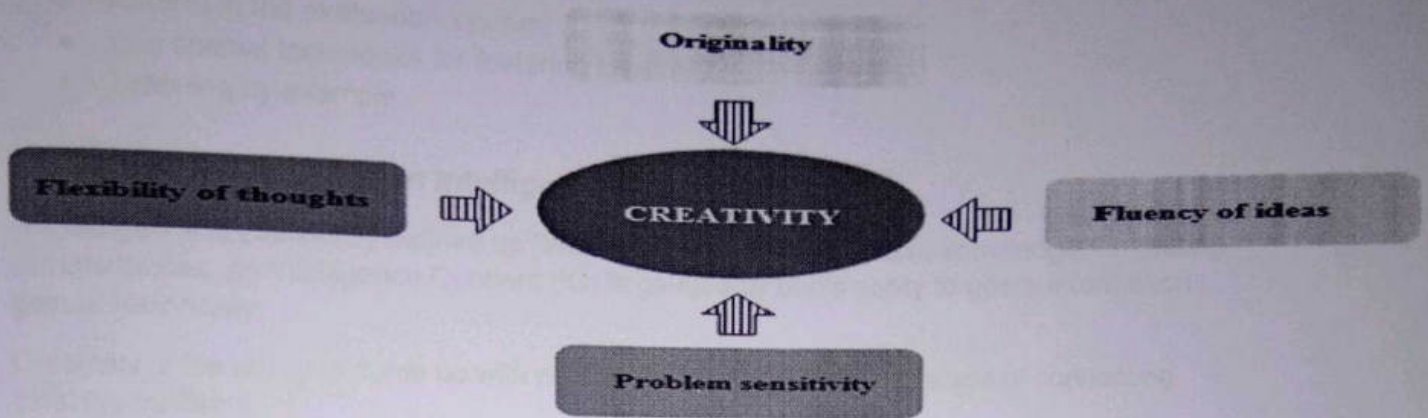
- Sudden idea occur through insight and it provide better solution to the problem.
- Thinker gets a insightful solution.

Verification

- Illumination is tried out.
- Verify idea or solution, whether it is correct or not.

Elements of Creativity:

1. **Fluency:** The ability to think well and effortlessly in order to generate a quantity of ideas, responses, solutions or questions. (Brainstorming builds fluency)
Ex: List all things you can think of that are blue or have the word "blue" in them (Butterfly, sea, sky, blueberry)
2. **Flexibility:** ability to easily abandon old ways of thinking, adopt new ones, and produce ideas, responses, questions or solutions in a variety of categories. Flexibility generates a variety of ideas.
Ex: Write many uses of paper?
3. **Originality:** It is the ability to develop ideas that are statistically unusual, novel or unique
Ex: Invent a machine to help you clean your room. Be sure to write down details on how the machine works, what it uses, and what it is made of. Draw a picture of your new invention and give it a creative title.
4. **Elaboration:** The ability to add details in order to modify or expand upon an idea or a general scheme.
5. **Sensitivity:** the ability to notice and perceive the problems before others notice it or see it again.



Measurement of Creativity :

The psychological tool used to assess the creativity of an individual is known as creativity test.

It also assesses the extent of their creative abilities.

For example:

- Wallach and Kogan Creative instruments,
- Torrance tests of Creative thinking,
- Minnesota Test of Creative thinking.

Verbal and Non-verbal test of Creativity :

- Consequence test
- New relationship tests
- Product improvement test
- Picture construction test
- Line figure completion test
- Picture construction test

Role of Teacher in fostering student's creativity:

- Freedom to respond.
- Opportunity for ego involvement.
- Encouraging originality and flexibility.
- Removal of hesitation and fear.
- Providing appropriate opportunities and atmosphere for creative expression.
- Developing health habits among children.

- Using the creative resources of the community.
- Avoidance of blocks to creative thinking.
- Proper organization of the curriculum.
- Reform in the evaluation system.
- Use special techniques for fostering creativity.
- Teaching by example.

The Relationship Between Intelligence & Creativity

Intelligence is classically defined as "the ability to acquire and utilize knowledge." In testing circumstances, an Intelligence Quotient (IQ) is gauged by one's ability to utilize information gained historically.

Creativity is the ability to come up with new ideas through a mental process of connecting existing concepts.

The ideas don't have to be revolutionary (which is a common misconception many people have about creative thinking), they just have to be new for the thinker.

The relationship between intelligence and creativity is that both of them are functions of the brain that process information to determine a solution or an answer to a problem.

Intelligence can be measured by the intelligence quotient or IQ. Creativity, on the other hand, is not so easy to measure. The general belief is that people with high IQs are generally more creative, and people who are highly creative have high IQs. This isn't necessarily true.

Although scientists have found a correlation between those individuals with an IQ of 120 or more having a higher level of creativity, the relationship between intelligence and creativity is more of an overlap of skills or abilities instead of a dependence on one another.

Guilford's model revealed two of the operations are divergent and convergent production, which depend on creativity and intelligence, respectively, to solve a problem.

Convergent thinking, or intelligence, applies to problems where there's only one solution. Math and science problems typically depend on convergent thinking to be resolved.

Divergent thinking, also known as creative thinking, takes several different approaches to solving a problem that may or may not have multiple solutions.

Creativity and intelligence are positively correlated because high ability is component of creativity, A highly intelligent person may not be creative but all the creative persons are definitely high in intelligence.

(i) Creativity is the ability to produce ideas, objects, or problem solutions that are novel, appropriate and useful.

(ii) Intelligence is subset of creativity.

(iii) Terman found that persons with high IQ were not necessarily creative. The same time, creative ideas could come from persons who did not even one of those identified as gifted, followed up through out their adult life, had become well known for creativity in some field.

(iv) Researchers have found that both high and low level of creativity can be found in highly intelligent children and also children of average intelligence. The same person can be creative as well as intelligent but it is not necessary that intelligent once must be creative.

SOLUTION FOR SHALINI'S PROBLEM:

As a teacher first we should be happy and proud because of shalini's innovative idea. Then we should identify the needs of Shali to continue her innovative work. We should support her in all aspects of new invention. The needs of Shalini can be identified in many aspects as the teacher can encourage and motivate Shalini to do further she can also give support to her financial needs by taking this project to the head of the department and government officials to support Shalini

But in case of Shalini teacher she killed the creativity of Shalini by saying "as a girl you no need to take this kind of creative work "this should not be the case for the student teachers or other teachers. Because the students were very creative and unique in their own style. So teacher should be the facilitator to the students and make them to think creatively.

Day 1 :

We are discussing about the problem given to us. The facilitator guides the group in a democratic way. Then reader began to read out the problem given to us. Then the technician had collected enough material related to are problem then the group members began to give different solution to that problem then at last the reflector collects everyones answer and fout together as a single solution and reflects the answer.

Day 2 :

In day 2 we collected the details in an theoretical way and discussed about the practical problem faced by the creative students. At last we find out the solution for the problem.

Day 3 :

At day 3 facilitator was asked to gives some details on reflection of learning and then the reflector was also asked to fill the form about the strength of one group. Then finally everyone were preparing the final report for are pogil activity and eagerly waiting for are final presentation.

Multiple choice questions

Intelligence and creativity

(Unit-2)

1. which type of intelligence are you expressing most of the time, while examining the data?

- a. Creative
- b. emotional
- c. analytical
- d. practical

நீங்கள் ஒரு தரவை(data) ஆராயும் பொழுது எந்த

அ. ஆக்கத்திறன்

ஆ. மனவெழுச்சி

இ. பகுப்பாய்வு

ஈ. நடைமுறை

2. which theorist put forth the triarchic Theory of Intelligence?

- a. Goleman
- b. Spearman

c.sternberg

Gardner

மூன்றுகாரணி (triarchic theory) நுண்ணறிவுக்

அகோல்மென்

ஆஸ்பியர்மென்

இ.ஸ்டென்பர்க்

ஈகார்டனர்

3. Who is the 'father of intelligence test?

a. Alfred Binet

b. John McCarthy

c. Howard Gardner

d. none of the above

அ.ஆல்பர்ட் பைனட்

ஆஜான்மெக்கார்தி

இஹாவர்ட்கார்டனர்

ஈ.இவர்களில் யாருமில்லை

4. Torrance test is used for to analyse persons' _____

a. personality

b. creativity

c. intelligence

d. mental health

அஆளுமை

ஆ. ஆக்கத்திறன்

இநுண்ணறிவு

ஈ. மனநலம்

5. Divergent thinking is to _____ as convergent thinking is to _____ ?

a. one solution, many solutions

b. many solutions, one solution

c. mathematical ability, verbal ability

d. extrinsic motivation, intrinsic motivation

பலதீவுகள்

ஆ.பல தீர்வுகள், ஒரு தீர்வு

வாய்மொழிதிறன்

உப்புறஉந்துதல்

6. Which of the following will foster creativity among learners?

[A] Teaching the students the practical value of good education

[B] Providing opportunities to question and to nurture the innate talents of every learner

[C] Emphasizing achievement goals from the beginning of school life

[D] Coaching students for good marks in examination.

சீழ்க்கண்டவற்றுள் கற்பவர்களிடையே ஆக்கத்திறனை

அநடைமுறைபற்றிய நல்ல கல்வியை கற்பித்தல்.

ஆ.மாணவர்களிடையே கேள்விகள் கேட்க

வாய்ப்பளித்து, அவர்களின் உள்திறமைகளை

வெளிக்கொணர்வது.

இபள்ளி தொடக்கத்திலிருந்தே சாதனை இலக்குகளை

அடைய வலியுறுத்துதல்.

ஈ.தேர்வுகளில் நல்ல மதிப்பெண்பெற பயிற்சி அளித்தல்.

அளித்தல்.

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