'One size - fits all', not while Assessing Creativity

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Abstract:

Introduction: Creativity is increasingly valued as an important outcome of schooling, frequently as part of "21st century skills." Creativity is a concept that is difficult to define and even more difficult to measure. Creativity assessment might be regarded as an attempt to recognize or identify creative characteristics or abilities among people or to understand their creative strengths and potentials.

Discussion: Creativity assessment efforts might be qualitative, quantitative, or both. Any one single instrument or analytical procedure cannot capture effectively and comprehensively, the complex and multidimensional nature of creativity.

Methodology: Consensual assessment technique is the idea, that a student is creative to the extent that appropriate observers independently agree he is creative. No person possesses all the characteristics nor does anyone display them all the time. As a result it is difficult to predict which student may become creatively productive adults. Design and plan for systematic assessment should be evolved. Creativity is complex and can be expressed in many different ways. Criteria of "one size fits all", should not be tolerated. Every individual has different characteristics and personalities. . All students have the potential to be creative if they are provided with innovative learning experiences and open-ended assessment tasks.

Conclusion: The Consensual Assessment Technique is a powerful tool for assessing creativity and its validity does not rise or fall with the success or failure of any theory. It has also been shown to be free of gender and race/ethnicity biases.

Key Words:- Creativity, Assessment, Education, Consensual assessment Technique.

Introduction:

"Creativity is intelligence having fun" **Albert Einstein**.

"Creativity now is as important in education as literacy. We should treat it with the same status" **Sir Ken Robinson.**

Creativity is known as lifelong skill that can be taken by our students into their adulthood, which will help them to solve the problems and help to build a better world. Many definitions of creativity have been put forward, but because creativity is complex and multi-faceted in nature, there is no single, universally accepted definition.

Definitions: The Many Faces and colors of Creativity

- **Teresa M. Amabile's** view of creativity involves an interaction of three components: domain-relevant skills, creativity-relevant skills, and task motivation.

- **Howard Gardner (1993)** "The creative individual is a person who regularly solves problems, fashions products, or defines new questions in a domain in a way that is initially considered novel but that ultimately becomes accepted in a particular cultural setting"

- **J. P. Guilford (1977)** "problem solving and creative thinking are closely related. The very definitions of these two activities show logical connections. Creative thinking produces novel outcomes, and problem solving involves producing a new response to a new situation, which is a novel outcome"

- **Joe Khatena and Torrence (1973),** "the power of the imagination to break away from perceptual set so as to restructure or structure new ideas, thoughts, and feelings into novel and associative bonds"

- **Abraham H. Maslow** -Creativity is as much concerned with people and the way they deal with their daily lives as it is with impressive products. Creative, self-actualizing people were described by Maslow as bold, courageous, autonomous, spontaneous, and confident.

- **Mel Rhodes (1961)** "Creativity cannot be explained alone in terms of the emotional component of the process or in terms of any other single component, no matter how vital that component may be"

- **E. Paul Torrance (1974)** defined creativity as "a process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies, and so on; identifying the difficulty; searching for solutions, making guesses, or formulating hypotheses about the deficiencies; testing and retesting these hypotheses and possibly modifying and retesting them; and finally communicating the results"

Specifically, creativity promotes healthy psychological functioning (e.g., Rasulzada & Dackert, 2009), student intrinsic motivation and creative self-efficacy (Beghetto, 2006), learning and long-term knowledge retention, and prepares students to make meaningful societal contributions (e.g., Elaldi & Batdi, 2016; Gajda, Karwowski, & Beghetto, 2017)

No person possesses all the characteristics nor does anyone display them all the time. As a result it is difficult to predict which student may become creatively productive adult.

Characteristics of creative people:

Creative people see themselves as creative, possess a desire to create, and have the self-confidence to work toward their sense of purpose in life. In other words, they are aware of their strengths, passions, and convictions. They work hard and intensely concentrate on a subject or problem of interest. It is common for the creative person to lose sight of time and place when working on a project. Others sometimes misinterpret such behaviors as absent-mindedness or anti-social tendencies. People exhibit these characteristics by not giving up in the face of adversity, taking responsibility for action, and actively seeking opportunities for applying their creative abilities.

Peoples understanding the characteristics of creativity vary and no one possess all of it and displays them all the time. Many of these characteristics can be taught and nurtured. We cannot predict which student may become creative person in future.

Characteristics can be categorized as follows:-

- The divergent thinking characteristic comes under generating ideas category, and involves fluency, flexibility, originality, collaboration and metaphorical thinking.
- The convergent thinking characteristic comes under digging deeper into ideas category and involves analyzing, evaluating, seeing relationships, designing to resolve ambiguity, understanding complexity.

Rhodes (1961), identified four strands of enquiry commonly referred to as the four P's, person, process, product and press. Treffinger (1988, 1991), recognizes the complex nature of creativity and the need to not recognize creative potentials and to enhance and develop creative productive thinking. He proposed that creative productivity arises from the dynamic interactions among four essential components i.e. Characteristics, operations, context and outcomes. Evaluating, selecting and using instruments. Over the past decades, many resources have been developed to assess creativity and creative thinking
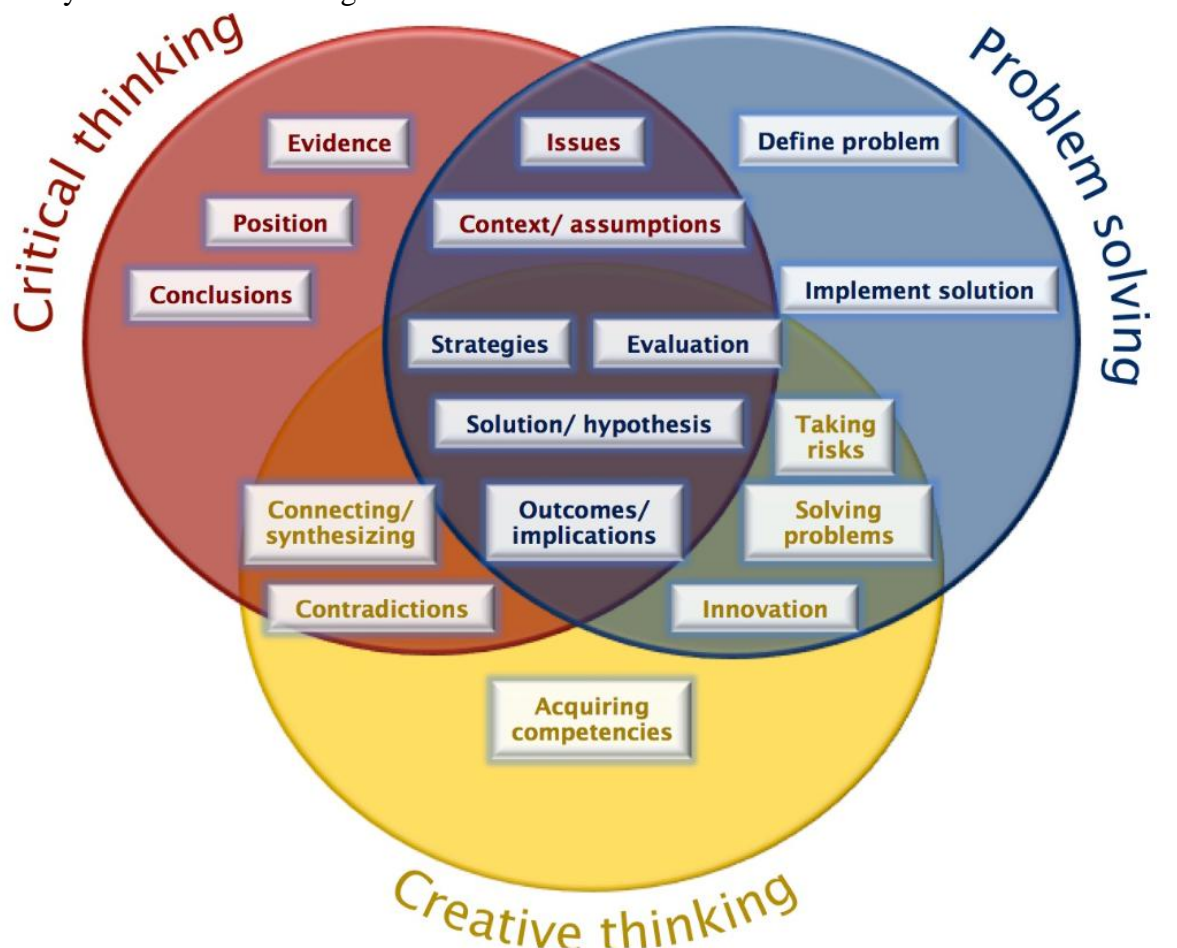

Fig.1:- Interrelated skills, Critical, Creative thinking and Problem solving.

Importance of Assessment of creativity:-

Assessment is a process of "taking stock" of an individual (or a group) by drawing together information from a number of sources and attempting to organize and synthesize those data in a meaningful way. Assessment draws upon many different kinds of data and frequently includes (but does not rely only upon) measurement sources. Assessment might be undertaken to identify and understand a person's (or a group's or team's) strengths and deficiencies or for more prescriptive reasons, such as for instructional planning or for placement in a specific experimental treatment or program. Assessment is, therefore, a broader and more inclusive term than measurement. Assessment involves gathering, organizing, analyzing and interpreting quantitative or qualitative data.

- Qualitative data: - it is based on observations, anecdotal records, information collected from others etc. The results may show bias.
- Quantitative data: - it is based on numerical scores from tests, rating scales, checklist, self report inventories, etc. This data is therefore expressed using percentiles, averages, means, etc. The results cannot be shown with bias.

Assessment is said to be undertaken to know and understand the person's strengths and deficiencies. Creative Assessment might be regarded as an attempt to recognize or identify creative characteristics or abilities among people or to understand their creative strengths and potentials. It involves gathering, organizing, analyzing and interpreting qualitative and quantitative data. A well planned process is needed and also systematic efforts should be done to understand creativity.

Linn and Gronlund (1995), observed," although most of the criticisms of testing have some merit, most problems are not caused by the use of test, but by the misuse of tests". Evaluation criteria can be based on three broad categories:-

1. General information
2. Technical information
3. Relevant literature

Design and plan for systematic assessment should be evolved. Creativity is complex and can be expressed in many different ways. Assessment plan should represent a workable way.

Data can be gathered in many ways about a person's creativity, like:-

- Can collect information about people's creativity through their actual behavior,
- Can collect data through past records,
- Can collect data through first hand observations,
- Can collect data through self-report by using personal checklist,
- Can collect data by using rating given by others,
- Can collect data by conducting test s with structured set of tasks or questions.

There are some negative and positive points using all these data collection criteria. So caution is to be taken. It should be remembered that, it will be very unwise to rely on a single Idea or Data

Collection method to fix a person's creative ability. *Fix a specific definition of creativity according to you that will help and guide you in assessing creativity.*

Understanding the creativity, will influence and guide your choice of assessment techniques. It is recommended to use as many sources as can be possible to collect the data. It is commonly said that," *what does not appear at one time, in one area, or with one assessment pattern, may appear at another time, in another context or with other tools".*

The results must be kept flexible, while declaring or categorizing a student or person as "highly creative" or "not creative", because people change and grow, respond differently in different areas under changing circumstances. Creativity can be achievable and attainable by persistent efforts and will.

Debates where going on to know, "Whether creativity, is an important educational goal for all students?"

If yes, then it is a great challenge for the traditional and regular educational program.

Some Questions posed by researchers and teachers:

- "Can creativity be measured?"
- "What assessment tools are available to assist us in recognizing creativity in students?"
- "How might we evaluate and compare various ways of assessing creativity?"

To answer these questions, three crucial terms should be clarified:

- *Measurement:* which refers to the use of any instrument or testing procedure through which quantitative data can be obtained
- *Test*: which refers to a particular kind of assessment that includes a standard set of items or questions
- *Assessment:* that involves gathering, organizing, analyzing and interpreting qualitative or quantitative data

But it is very much possible and will be appropriate to design some learning activities which can engage student, increase his confidence and competence in creativity related behavior. Educator's expertise and experience in the area of creativity will decide the efficiency of assessment**.**

Criteria of "one size fits all", should not be tolerated.

Every individual has different characteristics and personalities. When creativity or creative character in a student is not found, it doesn't mean he is not creative. He can change or can have different talent areas, or can be proved creative using different definition of creativity.

Awareness has been increased for cultivating creative and imaginative thought today due to societal need, as rightly said by Craft, 2005 "revolution of creativity in education". From the perspective of socio cultural research there is a need to find out ways in which social interaction with adults or peers facilitates children's creativity.

According to Sir Ken Robinson, "the educational system is responsible for killing curiosity and stigmatizing mistakes, which results in students being risk-averse and incapable to adapt the new ways. Before entering education, children are not afraid to be wrong (because they do not know

what is wrong). Then the schools destroy their curiosity, willingness to take risks and, consequently, their (innate) creativity". He adds that "we educate children out of their creative potential and create anything original; one must be ready to be wrong some times. Instead, we have a university-oriented system and career-oriented parents that kill the creative potential of young people, their interests and talents at an early stage".

There is no widely used definition of creativity in schools and no commonly accepted framework for assessing its development. Yet, if creativity is to be taken more seriously by teachers and educational policy makers they must be clearer about what it is. It will also help if there is an approach to assessing it that is both rigorous enough to be credible and user-friendly enough actually to be used by busy educators (Bill Lukas, 2016).
The judgments can be based and affected due to many different areas beyond the data collected like, policy considerations, public and political influences, economic considerations, societal emergencies, religious considerations, perceptions, International standards, etc.

What Is Important to Remember while doing assessment?
  1. Begin with a specific definition of creativity, which will guide you in specifying the characteristics you will see to assess.
  2. The factors or characteristics that are most important in your understanding of creativity will influence the kinds of assessment procedures and tools you will seek, select, and use.
  3. Use multiple sources of data to assess the relevant characteristics. No single assessment instrument or test provides evidence about all the possible meanings or elements associated with the construct of creativity.
  4. Be aware of the advantages and limitations of any instrument or tool from any of the sources of data.
  5. Data about a student's apparent strengths can be used for inclusion or to document the appropriateness of services, but data should not be used for "strong exclusion," since what does not appear at one time, in one area, or with one assessment tool may appear at another time, in another context, or with other tools.
  6. Use the results of all data gathering in a flexible way, rather than to establish rigid categorizations of students as "highly creative" or "not creative."

Linn and Gronlund (1995, pp. 6-8) proposed five general principles supporting effective assessment,as follows:-
   • Specify clearly what is to be assessed.
   • Select an assessment procedure that is relevant to the characteristics or performance you intend to measure.
   • Use a variety of procedures to attain a comprehensive assessment.
   • Be aware of the limitations of assessment resources.
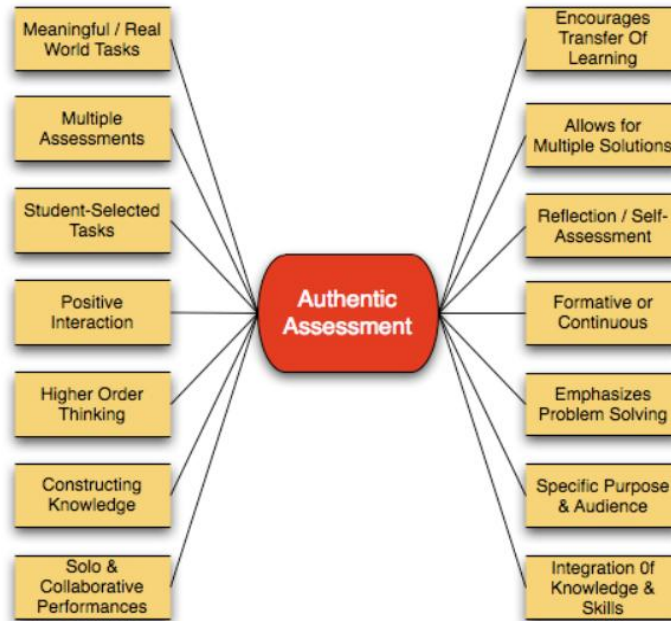   • Remember that assessment is a means to an end, not an end in itself.

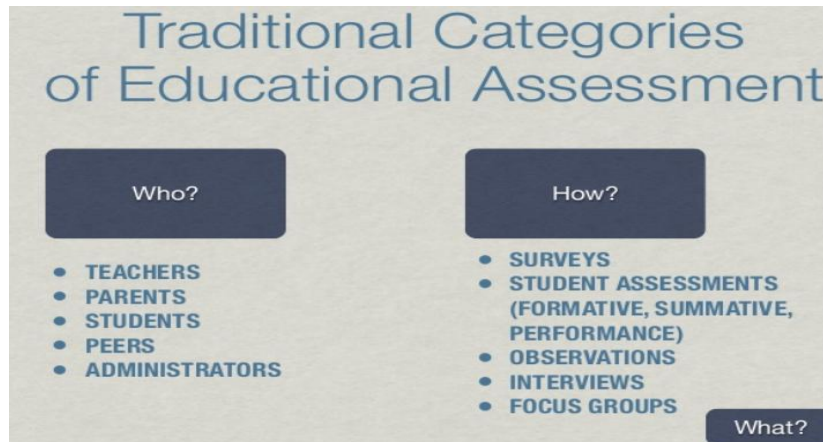Fig.2:- Authentic Assessment Chart (Chritianaostwald.weebly.com)

Fig 3:- Traditional categories of educational assessment (Creativity Assessments from NAGC 2015)

Resources for Evaluating and Selecting Instruments Norris and Ennis (1989) offered seven guidelines for examining tests of critical thinking. Their suggestions were wise, and their guidelines apply equally well to the task of examining creativity tests. They suggested:

1. Pay close attention to the directions, the items, and the scoring guide.

2. Take the test yourself, and compare your answers with those of the guide.

3. Satisfy yourself that the scoring guide is reasonable, but do not expect to agree with it completely.

4. Ask yourself often, "Does this really test for some aspect of critical [creative] thinking?"

5. For purported comprehensive critical [creative] thinking tasks, ask yourself, "Does this cover enough of critical [creative] thinking in a balanced manner to be called a comprehensive critical [creative] thinking test?"

6. For purported aspect-specific critical [creative] thinking tests, ask yourself, "Does this cover enough of the aspect?"

7. Read the test manual and note the statistical information, but remember that test publishers have a conflict of interest in deciding what information to include and exclude.

After going through all the literature, it was found to be comfortable with the Consensual Assessment Technique CAT, while assessing the creativity of the students, which can enable a teacher to guide and teach for creativity related tasks to students, more easily and efficiently along with completion of education syllabus.

Methodology- Consensual Assessment Technique for creativity:-

Consensual Assessment Technique (CAT) was first proposed by Amabile in 1982. The Consensual Assessment technique has often been called the 'Gold Standard' of creativity assessment and is widely regarded as one of the most effective tools for measuring creative work. Essentially, the technique is based around measuring creativity using an assortment of judges, who assess creative works individually and in isolation. It is based on the idea that, assessment of creativity of any field is the combined view of experts in that field. It is not based on any particular theory of creativity. Any one single instrument or analytical procedure cannot capture effectively and comprehensively, the complex and multidimensional nature of creativity.
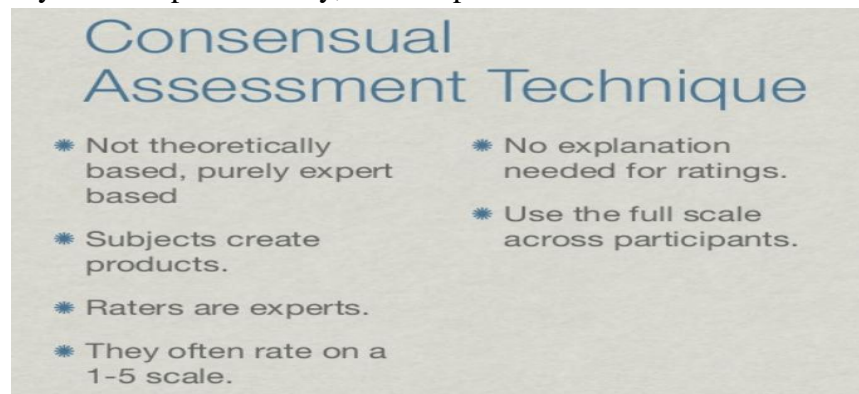

Fig 4:- Consensual Assessment Technique (Creativity Assessments from NAGC 2015)

The results of assessment procedure should be as reliable and valid as possible, is important criterion for judgment of creativity. Reliability is about repeatability and validity is about truth. If appropriate judges independently agree that a person or student is creative, then it must be accepted, just like dance, singing and cookery competition is judged by the judges, according to their perception, expertise in that area and seeing and feeling the talent. Appropriate judges must be chosen to assess the creativity, those who are familiar with that domain of Endeavour. Creative work is inherently subjective, and difficult to measure using conventional, standardized scales and tools the Consensual Assessment allows each assessment to be

carried out by people with experience and expert knowledge of the field. This allows the nuances of the work being analyzed to be understood and incorporated into the scoring, and aspects of creative work that may often be overlooked using conventional measuring tools are included in the assessment.

Conclusion

Creativity is becoming very important, although the subject is broad, vague and daunting. All students have the potential to be creative if they are provided with innovative learning experiences and open-ended assessment tasks. Existing creativity assessment tools are limited, especially for their lack of up-to date norms and theoretical framework. When teachers understand creativity they are, consequently, more effective in cultivating it in learners and when students have a better understanding of what creativity is, they are better able to develop and to track the development of their own creative talents.

The Consensual Assessment Technique is a powerful tool for assessing creativity. It has been well validated and is used widely in creativity research. The Consensual Assessment Technique assesses actual creative performance and is not linked to any particular theory of creativity, and its validity does not rise or fall with the success or failure of any theory. It has also been shown to be free of gender and race/ethnicity biases. It has great potential for creativity assessment in many areas of education.

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