

## **THE ROLES OF CREATIVITY IN PROBLEM-SOLVING THAT ENHANCE ORGANIZATIONAL PRODUCTIVITY: EDUCATION ECONOMICS TEACHERS PERSPECTIVE**

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### **Abstract**

The focus of this paper is on the roles of creativity in problem-solving as education economics perceived. It discussed the concept of creativity, types of creativity, diver part thinking in creativity, process of creative thinking, characteristics of creative students/individuals, positive attitudes that promotes creativity and negative attitudes that retard creativity. The paper further X-ray the concept of problem solving, steps in effective problem -solving process, mental blocks to creative thinking in problem solving, creativity senerpy in problem-solving role of Education Economics lectures in problem –solving and the integration of creativity and problem-solving theories in enhancing organization productivity.

**Keywords:** Roles, Creativity, Problem-solving, Productivity and Education Economics.

### **Introduction**

Life is one continuous process of contending with one challenge/constraint or the other; one problem or the other. These challenges could be physical or psychological. However, whatever the nature, man naturally crave solutions to them. He diligently searches for way(s) out. In most situations, conventional wisdom fails. This compels him to proceed in search of fresh ideas, options, perspectives, processes and procedures to overcome the troubling situation. Fernando et al (2013) opines that as he ventures into adopting or adapting known ideas or innovating novel ways to solving the problems, he, more or less, unconsciously moves into the realm of creativity.

Hence, meaningful problem-solving efforts call into play some measure of creativity. This fact is recognized by Alex Osborne in Brain (2014) when he argued that “creative problem-solving is the mental cum physical processes of searching for original and previously unknown solutions to a problem”. In the light of the foregoing, the importance of and relationship between the twin processes of creativity and problem-solving become obvious and much more easier to appreciate.

Advances in information and communication technology, have also led to radical changes in the traditional ways of doing things. These changes have also come with new opportunities and enormous challenges in our daily living. Policy makers have now realized that all talk about developing indigenous technology will amount to nothing unless the creative potentials of our children are developed early in school. hence educators have been emphasizing the need for creative and innovative approaches to addressing the ever-increasing problems that society is facing today. Properly handled in the formal school setting, creativity will enrich the ‘tool book’ of learners as they set out on problem –solving missions in and out of school (Alane, 2010).

As we therefore examine the topic “Creativity in Problem-solving”, nothing will be assumed. In any case, every meaningful discussion should be preceded by a clear cut definition of terms and the ramifications therefore. And the key terms of our paper are: Creativity and Problem-solving”.

### **Concept of creativity**

Creativity is a multi-dimensional psychological phenomenon. It is of the cognitive domain of human behaviour, which is pivotal to the attainment of distinction and class in all human endeavours. According to Ramesh in Brain (2014) creativity is, at once, an ability, an attitude and a process.

**As an ability**, creativity denotes the capacity to imagine and invent something new. It is the capability to develop and express oneself and ideas in new ways. It is the use of imagination or original ideas to create something new or to generate new ideas by combining, changing or re-applying existing ideas. In other words, creativity is inventiveness. Some creative ideas are astonishing and brilliant, while others are just simple and practical and which no one seems to have thought of yet. In all, every individual has some creative ability. Creativity is, in other words, the ability to produce original, appropriate and valuable ideas and/or solutions to problems (Wood &

Wood in Agulanna and Nwachukwu, 2017). The latter argued and rightly too that whatever the definition, creativity involves innovation, invention, originality or novelty and problem-solving.

**As an attitude**, creativity is the readiness to accept change and newness: a willingness to play with ideas and possibilities; a flexibility of outlook; the habit of enjoying the good, while looking out for ways to improve on it. Individuals are often socialized into accepting only a fixed number of permitted or normal things.

**As a process**, creativity involves constantly making efforts to improve on existing ideas and solutions, by making gradual alterations and refinements to their works. Contrary to the myth surrounding creativity, very few works of creative excellence are produced with a single stroke of brilliance or in a frenzy of rapid activity.

### Types of creativity

According to Kirton in Edward (2011), there are two types of creativity:

- a) Adaptive creativity (b) Innovative creativity

**Adaptive Creativity** refers to ability to apply existing ideas (knowledge) solutions, techniques to new scenarios or changed conditions.

**Innovative creativity** refers to the thinking that results in new ideas/solutions.

Adaptive creative thinkers try to do things better, while innovative creative thinkers, try to do things differently.

### Divergent thinking in creativity

At the core of creativity is divergent thinking- a thought process that enables an individual to generate ideas, by exploring many possible solutions. It is often used in conjunction with its cognitive colleague, convergent thinking, which follows a particular set of logical steps to arrive at one solution, which in some cases is a 'correct' solution (Selcuk and Mark, 2012).

In contrast, divergent thinking, typically, occurs in a spontaneous, free-flowing, non-linear manner, such that many ideas are generated in an emergent cognitive fashion. Many possible solutions are explored in a short amount of time and unexpected connections are identified. On completion of the process of divergent thinking, ideas and information are organized and structured, using convergent thinking.

Guilford in Michael and Sacramento (2012) illustrated divergent thinking process thus:

### Legend: PA/S stands for Possible Answer/Solution

The diagram shows that when an individual encounters a problem situation (stimulus) his thought explored possible solutions in different and differing directions/ways.

The elements of divergent thinking according to Guilford include: Complexity, curiosity, elaboration, flexibility, fluency, imagination, originality, risk-taking.

### Form of creativity include;

- i. **Affective creativity:** This form of creativity is found in a person who is particularly sensitive to his feelings and to the emotions of others. He has a keen insight into the ways other people are thinking and feeling. Such insight is likely to lead him into the affective use of language and symbols/when such a creative individual speaks or writes, his words call forth vivid images in the minds of other people. Such a creative individual is able to write and use other artistic means to arouse emotional responses in others. This form of creativity-affective creativity is most likely to be expressed in the arts.
- ii. **Problem-solving or functional creativity:** This form of creativity is made manifest in person who prefer to deal with functional problems and with practical situations, such as those found in technology, mechanics, and social situations. Such persons are less interested in their own and other people's internal state of affairs, their feelings and emotional responses. They are more likely to be interested in external problem. Such creative individuals like to work puzzles and will spend hours trying to figure out a better way of doing things.
- iii. **Abstract or formal creativity:** Creative individuals having the abstract or formal creativity has no particular insight into people's feelings; nor concerned about practical problems, but likes to get at the

reason behind things. Such persons like to categories, to find abstraction and generalizations, to look at things from a scientific point of view.

### The process of creative thinking

Creativity involves the creative process, and the creative process, in turn, embodies creative thinking. Thus, according to Marke et al (2008), creative thinking involves some definite and specific steps/stages. This process assumes the existence of a problem.

Wallas in Brain (2014) emphasized that there are basically four stages, namely- preparation, incubation, inspiration or illumination and verification or revision. Implementation was later added, as one of the stages of the creative process.

1. **Preparation:** This is the initial stage at which an individual becomes curious after encountering a problem or problem situation. It involves information gathering. For example, a student is given an assignment to write a paper. At this stage, the individual may organize his thoughts, brainstorm as differing ideas formulate; decides on the outline and so on.
2. **Incubation:** At the incubation stage, the individual begins to process and synthesize his ideas, using his imagination. He does not actively try to find a solution, but continues to mull over the ideas at the back of his mind, but the thought process is very active.
3. **Inspiration or illumination:** As ideas begin to mature, the individual has an epiphany (sudden revelation) regarding how to piece his thoughts together, in a manner that makes sense. The moment of illumination can occur unexpectedly. It's like a flash of light that suddenly makes clear what has hitherto been vague. For example, an individual with the task of putting together a project, may have an idea for the theme, while driving home from the school.
4. **Verification or Revision:** As soon as a solution reveals itself in an epiphany under illumination above, the individual then evaluates whether the insight is worth the pursuit. He may make changes to the original idea, so that it becomes richer and clearer. He may consult with peers or superiors/supervisors, regarding the insights during this stage, before pursuing it further. If he is working with clients or assistants, he may seek their input/approval, before moving on to the next stage. In other words, this stage involves testing out the new ideas/solutions/ options to ensure their workability.
5. **Implementation:** The implementation of an idea or solution in the creative process model, begins when an individual commences the process of transforming his thoughts into action.

### Characteristics of Creative Economics Teachers

Psychologists have argued that creative persons share a number of characteristics, which differentiate them from the ordinary, less creative individuals. These qualities include; competence, openness to experience, independence of mind, intrinsic motivation and perseverance.

- i. **Competence:** Creative individuals are usually competent in some areas of human endeavour: Genuine creative accomplishments are rooted usually, but not always in competence in one specific area of endeavour.
- ii. **Independence of Mind:** Creative individuals are usually independent thinkers and are not easily influenced by the opinions of others. They will take unpopular stands, if they must, and are often seen as non-conformists.
- iii. **Openness to experience:** Creative persons are open to ideas/experience. They usually spare thoughts about suggestions made by others, even if the ideas seem irrational. They are very curious and are at home with ambiguous situations.
- iv. **Intrinsic Motivation:** Creative individuals are largely and usually intrinsically motivated. They are motivated by passion and the sheer excitement and anticipated outcome of their work, whatever it is. According to Agulanna and Nwachukwu (2001), the sheer joy of creative activity in itself carries for creative people, its own impetus and regard. They enjoy the process of creation for its own sake.
- v. **Perseverance:** Creativity requires hard work and tenacity. An idle person who cannot persist on a task for a long time, cannot make any substantial creative contributions on the task in question.

### Theories of Creativity

Two main theories of creativity are: the Psychoanalytic theory and the Humanistic theory.

- a) The psychoanalytic theory of creativity is at the moment, reputed to have profound influence on the notion of creativity. Freud holds that originality, novelty and fantasy-attributes typical of a creative person, come from the unconscious mind. They occur when the ego relaxes, thus permitting the intuitions of the unconscious to come to light, i.e manifest. According to Sigmund Freud, creativity and neurosis share a common service- conflict in the subconscious. The creative individual accepts the free-rising ideas of the subconscious.
- b) The humanistic theory: The humanistic theorists hold that creativity is a good human quality and as such, one that must be cherished and fostered. They conceive of creativity as a human quality, possessed practically by everybody, in a variety of ways. Self-actualization is considered the motivating goal for creativity.

### Positive Attitudes that Promote Creativity

Attitudes are psychological dispositions that belong to the affective domain of human behaviour. Whether positive or negative, they have enormous implications for creativity. They should, therefore, be adequately understood. The positive attitudes that enhance creativity therefore include:

1. **Curiosity:** Curiosity is the strong desire to know/learning; a healthy questioning attitude. Creative people want to know things; all kinds of things. They crave knowledge, and knowledge does not, necessarily, require a reason for its acquisition. Further, knowledge, and especially wide-ranging knowledge, is necessary for creativity to flourish to its fullest. Much of creativity arises from variations of a known idea or combinations of known ideas. In line with this, Batigun and Atay (2014), the best ideas flow from a well-equipped mind. Nothing can come from nothing. The curious person's questioning attitude toward like is an asset. It's not a destructive one, reflecting skepticism or negativism.
2. **Challenge:** Creative people like to identify and challenge the assumptions underlying ideas, purposes, problems, beliefs, situations and statements. Many assumptions, of course, turn out to be quite unassailable, necessary and solid; but many others have been assumed unnecessarily. And breaking out of those assumptions, often comes with a new idea, a new path; a new solution. For example, traditionally, we think of a college as a physical campus with classrooms, a library, students, etc. But why must a college be a place at all? Thus the electronic college now exists, where students 'attend' lectures online from their homes.
3. **Constructive Discontent:** This is the pre-disposition to see a need for improvement and to propose a method of making that improvement. Constructive discontent is a positive, enthusiastic discontent, reflecting the thought, "Hey, I know a way to make that better". Constructive discontent is necessary for a creative problem solver. An individual, who loves everything the way it is, would not want to change anything. Only when an individual is discontented with something, when he sees a problem, will he want to try to solve it and improve the situation. One of the hallmarks of the constructively discontented person, is that of a problem-seeking outlook. The more the problems he finds, the more solutions and, therefore, improvements he can make. Another mark of constructive discontent, is the enjoyment of challenge. Creative people are always eager to test their own limits and the limits of problems; willing to work hard; to persevere and not give up easily.
4. **A belief that most problems have solutions:** By faith at first and by experience later on, the creative thinker believes that something can always be done to eliminate or help alleviate almost every problem situation. Problems are solved by a commitment of time and energy; and where there is commitment, few things are impossible.
5. **Ability to suspend judgment and criticism:** Many new ideas, because they are new and unfamiliar, seem strange and odd, bizarre and even repulsive. Only later do they become obviously great. Creative thinkers have capacity to suspend judgment when new ideas show up. They have optimistic attitude towards ideas, in general. They avoid condemning them with the typical kinds of negative responses such as. "That will never work; that's no good... that's impossible" and so on.

By too quickly calling our judgment into play, fragile early ideas and their sources can be destroyed. The first rule of brainstorming is to suspend judgment, so that idea-generating powers are

free to create, without the restraint of fear or criticism. “A crank is a genius whose idea hasn’t yet caught on”.

### Negative Attitudes that Hinder Creativity

The negative attitudes that retard and even hinder creativity include:

1. **Oh no, a problem?** The nature of reaction to a problem is often a bigger problem than the problem itself. Many people avoid or deny problems until it’s too late, largely because they have never learned the appropriate, psychological and practical responses to problem situations. A problem is an opportunity. Highly creative people welcome and even seek out problems, meeting them as challenges and opportunities to improve things. Confronting problems constructively and boldly, build confidence in individual learners and affords them better control over their affairs.
2. **It can’t be done:** This is the attitude of surrendering before encountering the problem. By assuming that something cannot be done or a problem cannot be solved, abolition, a person accords the problem a power it does not possess in the first place. And giving up before starting is, of course, self-defeating. A look at the history of solutions and the accompanying skeptics, man will never fly; diseases cannot be cured and so son. The appropriate attitude, therefore, is summed up thus, “the difficult we do immediately; the impossible takes a little longer”.
3. **What will people think?** There is strong social pressure to conform and to be ordinary and not creative. The constant emphasis in society is toward the ruthlessly practical and conformist. Some peoples’ herd instinct (i.e the inclination in people/animals to think or behave like the majority) is so strong that they make sheep look like radical individualists. It is easier to be “wrong with the majority” than “right and alone”. They are scared of not conforming to the routine patterns/ways of doing things. This stifles creativity, “progress is made only by those who are strong enough to endure being laughed at”. Ridicule should be viewed as a budge of real innovative thinking.
4. **Fear of failure:** The fear of failure is one of the major obstacles to creativity and problem-solving. The remedy is change of attitude toward failure. Failures along the way should be expected and accepted. They are simply learning tools that help focus the way toward success. Failing is a sign of action, struggle and attempt-much better than inaction. “Mistakes are not fun, but they, sure, are education”.

### Hindrances to children creativity

One of the most important aspects of the problem of helping children become creative is that of developing within them the motivation to be creative. However, this inner drive could be hindered and the creative urge quenched if teachers in the Universal Basic Education (UBE) classroom indulge in the following practices in school.

- a) High standards of achievement for low level of work: if creative children are given the same work as the average or even below average or even below average children, and are expected to follow the same steps as other children, some of them will refuse to follow these steps and hence are scored lower than the average and the below average children. Except such children are identified and graded based on their techniques, the creative abilities in them shall be stifled.
- b) Non-flexibility of assignment: Some teachers are so rigid in their techniques and methods and would not appreciate new directives/ideas brought forth by children. Some of them even embarrass the children who bring novel ideas about the solution to problems. To the extent that this practice continues, the higher the rate of hindering creativity.
- c) Impatience of adults: Some teachers and parents hold adult standards of perfection that are so important to them that they cannot bear to see children’s work fall short to these standards. They prefer to do everything by themselves to that children’s trial may not fall short of these expectations. To the extent that this continues, to that extent is creativity hindered in the Universal Basic Education (UBE) programme.
- d) Conformity to group standards of mediocrity: If schools do not hold up high standards of achievement and if opportunities for advanced and challenging work are not offered, creative children will probably not be able to withstand the pressure to conform to the standards of mediocrity in their own age group.
- e) Teachers’ attitude: The teachers’ attitude towards creativity in specific areas affects what he does to help children with abilities in those areas. The teacher who dislikes a particular subject may unconsciously communicate this dislike to the children. At times, he might not teach the subject at all,

or if he teaches it, he might do so with less animation than he gives to the teaching of his/her favorite subjects.

- f) The classroom atmosphere: A classroom atmosphere that is not free from criticism, undue tension, emphasis upon adult standards, and competition cannot motivate creativity. These vices are not exclusive in decreasing the motivation of children for creativity, they are to serve as illustrations of how our school system before the Universal Basic Education sometimes, consciously and unconsciously, discourages creativity.

### **The Concept of Problem-Solving**

From birth, every individual is beset with some problem or the other. There are needs and motives that are to be satisfied. For this purpose, definite aims and objectives are set. Tsemg et al (2013) observed that in an attempt to realize them, the individual experiences obstacles and interferences in his bid to achieve them. The attempts create problems. Hence deliberate efforts have to be made to overcome these impediments. Problem-solving refers to formulating new answers, going beyond the simple application of previously learnt principles or rules to find a solution to a new problem (Agulanna and Nwachukwu, 2017).

Hence, the productive work involved in the evaluation of the challenging situation and the strategies deployed to realize one's goals is collectively termed: Problem-solving, problem-solving is, therefore, an essential activity for the advancement of both the individual and society.

The meaning and nature of problem-solving is further illustrated by the following definitions made by notable psychologists:

“Problem-solving behaviour occurs in novel or difficult situations in which a solution is not immediately available the or obtained through the habitual methods of applying concepts and principles derived from past experiences, in very similar situations”. (Woodworth and Marquis, 1948).

“Problem-solving is a process of overcoming difficulties that interfere with the attainment of a goal. It is a procedure of making adjustments, inspite of interferences (Skinner, 1998).

An analysis of the above definitions, highlights the following features of the meaning and nature of problem-solving behaviour”

- i) In effort to satisfy one's needs and realize the set goals, problem-solving behaviour arises only when the goal is purposeful and essential to the individual; when interferences and obstacles cannot be overcome by simple habitual acts.
- ii) An individual has to engage in serious mental work by systematically following some well-organized steps for the removal of the difficulties and obstacles.
- iii) Problem –solving behaviour involves quite deliberate, conscious and serious effort on the part of the problem-solving.
- iv) Problem –solving behavior helps the individual in the growth and development of his personality, making him wiser through appropriate adjustments. It also contributes significantly to the development and progress of society.

In all, therefore, problem –solving is a deliberate and purposeful act on the part of an individual to realize set goals/objectives, by inventing some novel methods or systematically following some planned steps, for the removal of interferences and obstacles in the path of the realization of set goals.

### **Strategies in effective problem-solving process**

From studies of the behaviour of animals and humans involved in the process of problem-solving, psychologists have established the different steps involved in the process. Brasford and Barry Stein in Selcuk & Mark (2012) established a five-step process basically associated with the task of problem-solving. They referred to these steps as **IDEAL** thinking and arranged them in the following order:

- |   |   |                                       |
|---|---|---------------------------------------|
| I | - | Identifying the problem               |
| D | - | Defining and representing the problem |
| E | - | Exploring possible strategies         |
| A | - | Acting on the strategies              |

L - Looking back and evaluating the effect of the efforts made.

Bourne, Dominowski and Loftus in Michael and Sacramento (2012), on their part, posited a three-step process in problem-solving namely:

- Preparation
- Production
- Evaluation

In other words, we prepare; we produce and we evaluate in the task of problem-solving.

### **Theories of Problem-solving**

The stimulus- Response (S-R) theory of problem –solving emphasizes the importance of trials and error in problem-solving. It holds that, through a gradual process of elimination of errors and collation of correct responses, a problem is solved. The history of trial and error approach to problem-solving dates back to Thorndike’s experiment with rats.

Conversely, the Gestalt psychologists, posit that the problem –solver response to a system of relationships. They emphasize that the learner’s perceptual re-organization of the problem in an effort to achieve insight into the solution. In other words, solutions to problems are arrived at through sudden insight.

### **Elements that hinder economics teachers’ creative thinking in problem-solving**

Bransford and Stein in Selcuk and Mark (2012) posited that there are hindrances to creative thinking in the problem –solving process. These include:

- i) Response set: This is tendency to use tried and true/established methods of solving problems or a relatively new solution that has worked on a recent problem situation (Agulanna and Nwachukwu 2017). It usually beclouds the perception of an individual of the need to vary the known method to solve a slightly different problem.
- ii) Prejudice: This is a preconceived idea, not based on reason or actual experience. The older we become, the most pre-conceived ideas we have about things. These preconceptions often prevent us from seeing beyond what we already know or believe to be possible. Prejudices inhibit us from readily accepting change and progress. Hence in problem-solving situations, we must look out for manifestations of prejudices and effectively address them.
- iii) Functional Fixation: This is the tendency to find it difficult to use ideas/things in unconventional ways. It is a cognitive bias that limits an individual to using an idea or object only in the way it is traditionally used. Many a time, we see an object only in terms of its name, rather than in addition to what it does. Thus for example, we see a mop only as a device for cleaning a floor and do not think that it might also be useful for clearing cobwebs from the ceiling; washing the car and propping a door open or closed.  
There is also a fixation of people. Think for a while how you react when you see your pastor/teacher mowing his lawn or your auto-mechanic on a TV show promoting a book. Too often we permit only a narrow range of attitudes and behaviour in dealing with problems, based on bias, prejudices, hasty generalization or limited past experience. For example, “I can’t believe he said that” or “Imagine her doing that”.
- iv) Lack of prerequisite knowledge: Lack of prerequisite knowledge can hinder an individual from being able to solve a problem. Hence, the need for the teacher to ensure that problems are of appropriate level of difficult and suits the experience level of the students.
- v) Learned helplessness: This is the feeling that I don’t have the tools, knowledge, materials, ability to do something, so I might as well not try. We tend to readily rely on other people for almost everything. We think small and limit ourselves. For instance when in need of information, there are libraries, bookstores, professors and of course the internet. We should not yield to helplessness in problem situations. All we need is the motivation and commitment.
- vi) Psychological block: Psychological blocks prevent us from doing something just because it does not sound good or right, which is pretty ridiculous. Overcoming such blocks are really beneficial.
- vii) Lack of proper understanding of the problem: Often, even able students do not understand the problem before attempting the solution. In order to achieve success in problem-solving, the students should avoid haste. They should take time and study the problem well.

### **Creativity in Problem-solving: A synopsis**

In the enterprise of education, there is need to nurture and stimulate creative abilities for effective learning and problem-solving. Put differently, knowledge, affective attributes and skills which do not find expression in problem-solving, have little or no relevance in life and living.

### **Creative abilities needed**

According to Bransford, Stein in Selcuk and Mark (2012), self-confidence, persistence, ability to see relationship and establish associations, divergent thinking, ideation, ideational fluency, flexibility, curiosity and originality are some of the important creative abilities, which are basic to and associated with creative output and problem-solving. Hence teachers and parents should realize the need to provide proper and enhancing environment for the nurture and stimulation of these creative abilities in children.

Approaches for fostering and stimulating creativity is problem-solving among economics students.

- i. Freedom to express and respond.
  - ii. Opportunity for ego involvement
  - iii. Encouragement of originality and flexibility
  - iv. Discouragement of hesitation and defeat
  - v. Provision of appropriate opportunities and atmosphere for creative expression.
  - vi. Development of healthy habits among children.
  - vii. Avoidance of blocks to creative thinking
  - viii. Proper organization of the curriculum
  - ix. Proper evaluation and timely feedback.
- (a) Use of appropriate techniques for fostering creativity, like brainstorming; which is a group creativity technique by which efforts are made to find a conclusion for a specific problem by gathering ideas, spontaneously contributed, by its members.
  - (b) Use of learner-centered teaching models, methods and techniques.
  - (c) Teaching with and by example
  - (d) Open-ended questioning style

### **The Role of the Economics Teachers in Problem-solving**

Education prepares students to be able to solve their problems, in and out of school. hence, teachers have a very critical role to play in equipping students to handle their problems successfully.

Problems vary in nature and scope, so also the methods/strategies for tackling them, are as varied. How, therefore, can the classroom teacher assist students with strategies/techniques for problem-solving. Agulanna and Nwachukwu (2017) proffer suggestions in this regard.

- i) Encouragement of flexibility and use of unconventional ideas: Students should be encouraged to generate many different and often unconventional ideas or answers. Teachers should propose different possible uses of objects/options and invite students to offer additional possibilities. It is helpful if the teacher develops exercises involving unconventional uses to common objects.
- ii) Moderation of Emotion and Motivation: Teachers should moderate students' emotions and motivation to undertake problem-solving tasks, studies have shown that extreme motivation and excessive involvement of students in problem-solving tasks do not augur well with them in creative problem-solving efforts. Extreme motivation boost up anxiety.  
The teacher should lessen extreme motivation and de-emphasize the importance of getting the correct options/solutions. Emphasis should be placed on processes of creative problem-solving rather than the ultimate outcome.
- iii) Appropriate level of difficulty of tasks: Problems should be of appropriate level of difficulty to the students' developmental and motivational level and experience. If and when problems are far above the learners' developmental level, they become despondent and despair, to make any meaningful attempts at the problem. They, in effect, retreat. Conversely, if the problems are too cheap, the learners will feel unchallenged and consequently lose interest.

According to Al jughaiman et al (2005), the teacher should, therefore, clearly choose problems aright; indicate the relationship of facts that could lead to solutions; elucidate on the relevant principles of facts that could lead to solutions; elucidate on the relevant principles involved and associate them with experiences that illustrate the principles.

- iv) Practice: Practice makes perfect: This is apt in the context of problem-solving. The teacher should, therefore, create opportunities for practice in various problem –solving situations, so that the learner would acquire mental readiness and maturity through practice and be able to solve various and varied problem types.
- v) Group work in problem-solving: This is strategy that should be encouraged. In the group, learners are able to share, ideas, compare notes, brainstorm and pull their ideas in problem identification, definition, information collection; analysis, synthesis and conclusions. Wausmeier, Harris, Wiersman in Agulanna and Nwachukwu (2017). The sum total of the output if the group is superior to that of an individual learner. However, the sum of the work of individuals working alone, is invariably greater and of better quality than that of the same individuals assembled into a group.

### **Conclusion**

From education economics programme perspective of creativity is problem solving its aims and specific objectives, care must be taken that it does not deliberately foster drop out, rather it should encourage and foster creativity so that participants of the programme may in due course become useful to themselves and the society at large. Since everybody has a personality and interest as well as some creative talents, then education economics teachers should as much as possible to develop learners capacity to think so that their formal education would result in the production of new products for the good of the society.

### **Recommendations**

1. Teachers should always encourage in creativity building capacity need of the learners.
2. Strategies should be put in place by government to address the decreasing motivation of learners for creativity.

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