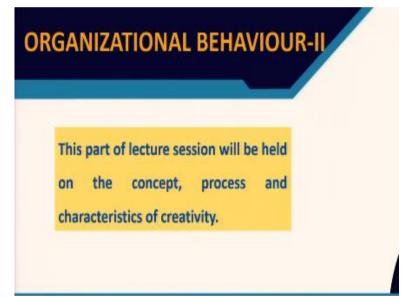
Organizational Behaviour - II Prof. Susmita Mukhopadhyay Vinod Gupta School of Management Indian Institute of Technology-Kharagpur

Lecture - 43 Creativity

Welcome back. Welcome to the session on creativity. Today we are going to discuss on creativity which is a major component of problem solving. Problem solving and creativity are very intricately linked in organizational scenario so that we can come up with certain ideas, certain ways of solving problems, which are unique in nature and which give new ways to solve the problem and makes it more effective solution.

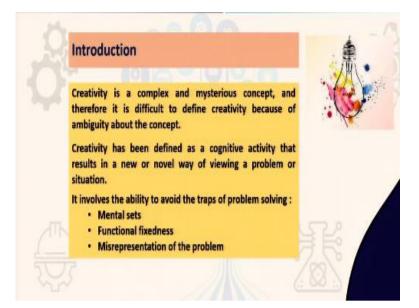
So, in today's discussion, we are going to look into the details of creativity.

(Refer Slide Time: 01:07)



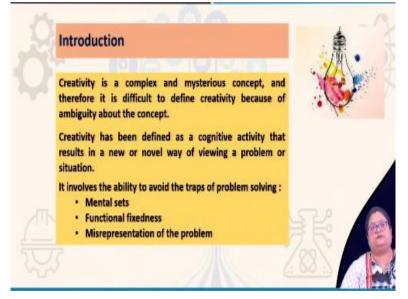
In this part of the lecture session, we look into the concept process and the characteristics of creativity.

(Refer Slide Time: 01:19)



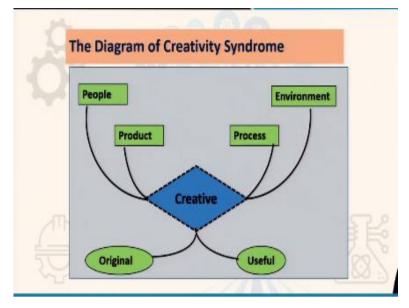
Now what is creativity? Creativity is a complex and mysterious concept. And therefore, it is difficult to define creativity because there is lot of ambiguity about the concept. Creativity has been defined as a cognitive activity that results in a new and novel way of viewing a problem or situation. It involves the ability to avoid the traps of problem solving, which are mental sets, functional fixedness and misinterpretation of the problem.

(Refer Slide Time: 02:03)

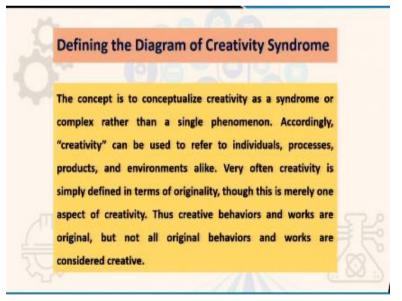


Creativity means a belief in new idea and making them into reality in the forms of products, goods or services provided by the organizations in the marketplace. Creativity has been defined in various ways. Amabile has defined creativity as the production of novel appropriate ideas in any realm of human activity, from science to arts, to education to business, to everyday life.

(Refer Slide Time: 02:36)



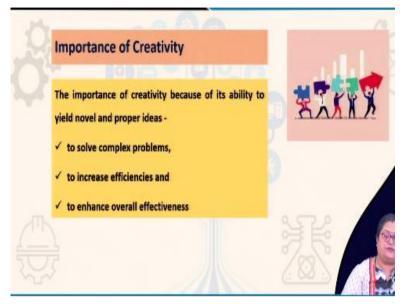
Now here we are going to see the diagram of the creative syndrome. So, what we can see over here, when we are talking of something which is creative, it has to be original in nature and it has to be useful and it can be related to like anything either the product or the process and it is the people and the environment to drive the creativity. (**Refer Slide Time: 03:08**)



So let us see this syndrome in details. The concept is to conceptualize creativity as a syndrome or a complex rather than a single phenomenon. Accordingly, creativity can be used to refer to individuals, processes, products and environments alike. Very often creativity is simply defined in terms of originality though this is merely only one of the aspects of creativity.

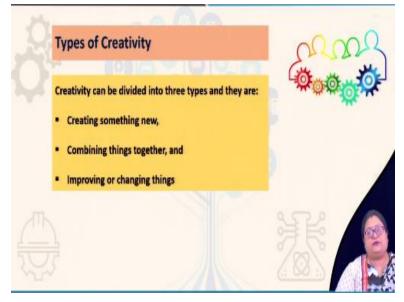
These creative behaviors and works are original. But all original works and behaviors may not be considered to be creative.

(Refer Slide Time: 03:54)



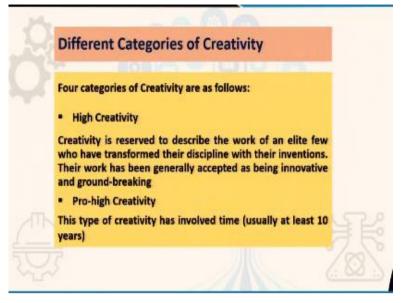
The importance of creativity because of its ability to yield novel and the proper ideas. To solve complex problems, to increase the efficiencies and to enhance overall effectiveness.

(Refer Slide Time: 04:15)



There are different types of creativity. There are different types of creativity. We can define creativity into three major types like creating something new, combining things together, and that synergy is something new. Improving or changing things.

(Refer Slide Time: 04:41)



There are different categories of creativity based on the like, how creative it is. So first one is that of high creativity. The creativity is reserved to describe the work of an elite few who have transformed their discipline with their inventions. Their work has been generally accepted as being innovative and groundbreaking.

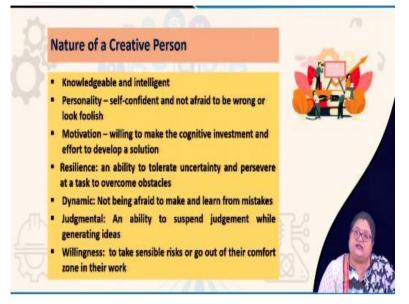
Pro-high creativity. This type of creativity has involved time to evolve, that usually at least 10 years.

(Refer Slide Time: 05:21)



Little creativity. Creativity is acting with flexibility, intelligence, and novelty in everyday life. This results in creating something new that has originality and meaningfulness. Mini creative. It is a novel and personally meaningful interpretation of experiences, actions and events. It may not be visible to outsiders and may consist purely of ideas and connections that the learner creates.

(Refer Slide Time: 06:00)



What is the nature of a creative person? The creative person has to be knowledgeable and intelligent. As per personality wise, he or she needs to be self-confident and not afraid to be wrong or look foolish. As motivation is concerned, they are willing to make the cognitive investment and effort to develop a solution.

They show lot of resilience and ability to tolerate uncertainty and persevere at the task to overcome the obstacles. They are dynamic in nature, not being afraid to learn from mistakes and also make mistakes and learn from it. Judgmental. They have the ability to suspend being judgmental, while generating ideas. Willingness. It is to take sensible risks or go out of the comfort zone of their area of work. So, these are the nature of a creative person.

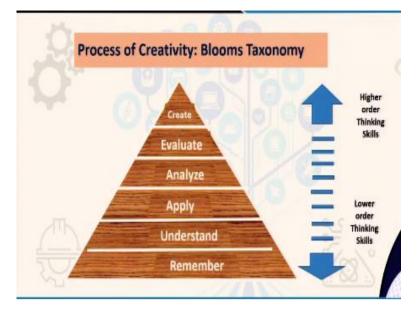
(Refer Slide Time: 07:08)



Stages of creativity. Stage 1 is that of preparation, which is knowledge acquisition and developing and testing possible solutions. Stage 2 is incubation, where getting away from the problem can sometimes lead to creative solutions like you are detaching yourself for the time being and you are thinking on your own like you are introspecting like and you are thinking in your mind, and you are trying to make connections with the facts.

And that gives rise to insightful learning and sometimes also non insightful learning. Though in incubation, it may appear like you have detached yourself from the problem. But actually, at the back of your mind your cognitive processes are working on the problem. Because it is working on the problem in stage 3, suddenly what happens is illumination is a sudden discovery of a solution.

And stage 4 is verification, where it is the evaluation of the insight does it really solve the problem or is it the best solution? (**Refer Slide Time: 08:25**)



What is the process of creativity? We can arrange it according to the Blooms Taxonomy of the thinking skills involved in creativity. So, you find the lower order thinking skills and there is the higher order thinking skills. So first is like remember, understand, apply, analyze, evaluate and create. Create is at the highest order of thinking skills.



Process of Creativity: Blooms Taxonomy Bloom's original taxonomy includes creativity in the taxonomy and places creativity above evaluation as a higher order thinking skill. An alternative, and probably more accurate, representation would be to include creativity as a process involved in skills at all levels represented in the taxonomy, and increasingly so with higher order skills. There are several character traits and learning habits that affect a learner's personal disposition, motivation and confidence to be creative.

What is the process of creativity according to Blooms Taxonomy? Blooms original taxonomy includes creativity in the taxonomy, and places creativity above evaluation, as the higher order thinking skill, and alternative and probably more accurately representation would be to include creativity, as a process involved in skills at all levels represented in the taxonomy.

And increasingly so with higher order skills, because if you want to remember also you may remember it in a creative way. If you want to understand things, you can do it in a creative way. So actually, creativity should be like intertwined with all the layers and it should be increase in its intensity as you move up to the higher layers. There are several character traits and learning habits that affects a learner's personal disposition, motivation and confidence to be creative.

(Refer Slide Time: 10:13)



There are certain environmental influences on creativity also. If creativity is valued in the cultural setting, motivation to be creative increases. When practical constraints are put in creative thinking, it leads to low creativity. Practical evaluation of creative ideas occurs early and it restricts the ideas that can be produced. Thinking about completely impractical ideas can lead to less impractical ideas which can lead to practical innovative ideas.

Individual production of ideas produces more creative ideas that group production. So, what you can see over here, if there is a like environment which supports creativity, then you motivate, then you get motivated to become more creative. When there are some constraints regarding the, like whether it will be like applicable or not like how much resources do you get or not, whether how much things you are wasting or not.

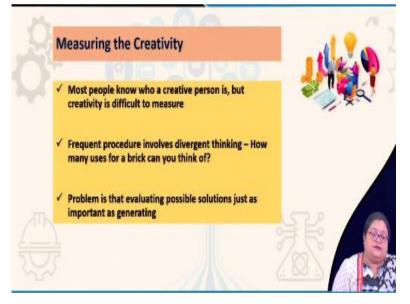
So, when these kinds of practical constraints are put on creative thinking, like you have to think in this way when it becomes very guided nature of creativity, sometimes

it becomes low creativity. So, and after like it is you do an early evaluation of your creative ideas. And so, what happens like you may think like, okay I am not able to do anything. It is not ideas are not working out and that may act as a barrier in creative thinking.

So, and thinking about completely impractical ideas can lead to less impractical ideas, which can lead to practical innovative ideas. So, if you start thinking like something which is very impractical, then you take like, you can revisit it again and try to find out how you can transform that into something which is workable, and it can lead to practical like innovative ideas.

And while you are working individually, so in those cases like sometimes more creative ideas come up from a particular individual, rather than when you are working in a group because if you are thinking something and the others are giving feedback, which is may restrict in some cases your creative nature also.

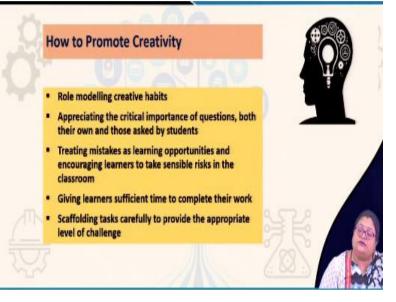
(Refer Slide Time: 13:18)



Measuring the creativity. Most people know who a creative person is, but creativity is very difficult to measure. It is a frequent procedure involves which is divergent thinking, how many users for uses for a break like that you can think of. Problem is that evaluating possible solutions, just as it is as important as generating the solutions. So, measuring creativity is we have to have a proper yardstick of measuring it. Because like, how to like you go for this measuring this divergent thinking. So, and what are the proper yardsticks for measuring the solutions, possible solutions. It is not only important to generate ideas, but to find out whether they are really usable ideas or not. Because you have seen in the creativity syndrome slide like it is not only originality that is important, but it has to be usable also.

So, in that case, like evaluation of the possible solutions is also important as it is for the generating of the ideas.

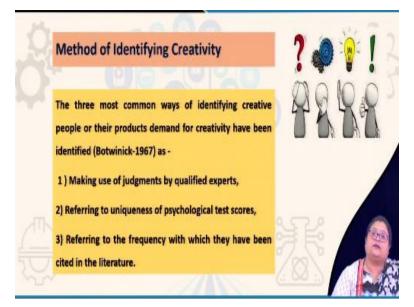
(Refer Slide Time: 14:47)



Now our point of discussion over here is how to promote creativity. We can do so in the organization by role modelling creative habits, appreciating the critical importance of questions both their own and those asked by the students or team members or juniors whoever it is. Treating mistakes as learning opportunities, it is treating mistakes as learning opportunities and encouraging learners to take sensible risks in the classroom.

So, you can talk of like how we can train people to be creative, giving learners sufficient time to complete their work. Scaffolding tasks carefully to provide the appropriate level of challenge. So, in order to come up with a creative solution, the tasks need to be challenging also. So how to increase the difficulty level to make it more challenging gradually to the learner is also very important over here, if you want to promote creativity.

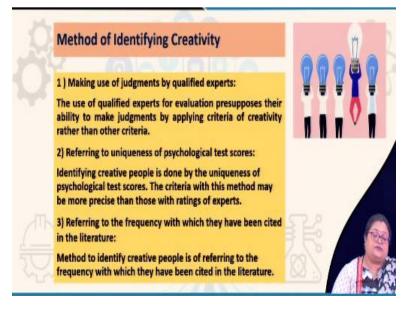
(Refer Slide Time: 15:58)



Now what are the methods of identifying creativity? The three most common ways of identifying creative people or their products demand for creativity has been identified as making use of judgments by qualified experts, referring to the uniqueness of the psychological test scores and referring to the frequency with which they have been cited in the literature.

So, like if something has been creative in nature, so it must have been referred too. So, people may have liked reviewed about it. So, the three most common ways of identifying creative people or their products, so is like what experts are thinking about it and what are the uniqueness in it and also whether it has been like used by majority in terms of references.

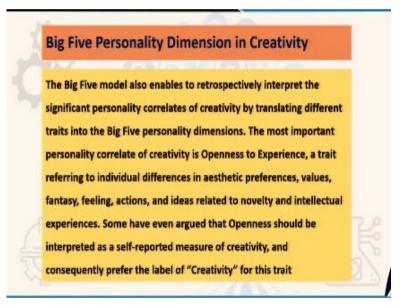
(Refer Slide Time: 17:08)



The use the qualified experts for evaluation presupposes their ability to make judgments by applying criteria of creativity, rather than other criteria. Referee to uniqueness of a psychological test scores means identifying the creative people is done by the uniqueness of the psychological test scores. The criteria with this method may be more precise than those with the rating of the experts.

And referring to the frequency with which they have been cited in literature is so it is a method of identifying creative people by referring to the frequency with what they have been referred to in the literature by others who have reviewed their work, who have tried to replicate their work in other things.

(Refer Slide Time: 18:05)



Now is there any personality dimension which is related to creativity? The big five model also enables to retrospectively interpret the significant personality correlates of creativity by translating different traits into the big five personality dimensions. The most important personality correlate of creativity is openness to experience.

A trait referring to individual differences in aesthetic preferences, values, fantasies, feelings, actions, and ideas related to novelty and intellectual experiences. Some have even argued that openness should be interpreted as a self-reported measure of creativity, and consequently prefer the label creativity for that trait.

So, if you are open to experiences, and like if you can learn from other cultures, if you are imbibing certain values in yourself, and like how you are like expanding your

thought processes regarding something new, and what are your intellectual experiences with regards to that. So, these may vary from person to person and this is taken together as openness to experience.

So, if you are keeping yourself more open to experiences that there are chances that you are getting more experienced, enriched, and if you can make those ideas holistic in nature, and you can learn from it then it leads to more of creativity because you can always like transfer your learning from one domain to another by drawing analogy, by like testing with the concept in one field with the testing in another field.

And go for like interdisciplinary or transdisciplinary kind of work, or even thought process while you are trying to refer with examples and thinking with analogy. This helps to increase your creativity.

(Refer Slide Time: 20:32)



Now these are the big five dimensions in creativity, like openness to new experiences, intellectuality curious and aesthetic sensitive people they are like more creative and expressive, verbal, active and self-confident. They are also creative and emotionally unstable, obsessive, anxious and sensitive people are also somewhat creative, because until and unless their anxiety is answered they will go in search for answers and this journey in search for answers may be referred to as creativity.

(Refer Slide Time: 21:24)



So, these are some of the references that we have referred to and for developing the slides.

(Refer Slide Time: 21:34)

ONCLUSION
This part of lecture session has given clear picture on the creativity,
concept, importance, methods, skills and steps/process of creativity
which may enhance the level of thinking and perception of learners
on all these aspects of leadership development.
Next part of the lecture we will focus on creativity and different field
of its application. Thank you all

And we hope like in this lecture, we have been able to discuss with you the concepts, important methods, skills and steps of creativity. So, which will help us to think of it in a different way and the perception of the learners, will help the perception of the learners to develop on these aspects of leadership development. So, we will in the next part of the lecture, we are going to focus on creativity and different fields of its application. Thank you.