Soft Skills Development
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Lecture - 28
Creativity: Activities Applied

Hello friends; in a last talk where we talked about the theoretical aspect of creativity; we were anticipating coming to this part where we would actually looking at some tools which can used by you for creativity. However, before we go on to that let us have a quick over view of the areas that we are going to address as well as a bit little bit of refreshing of what we had done in the last time.

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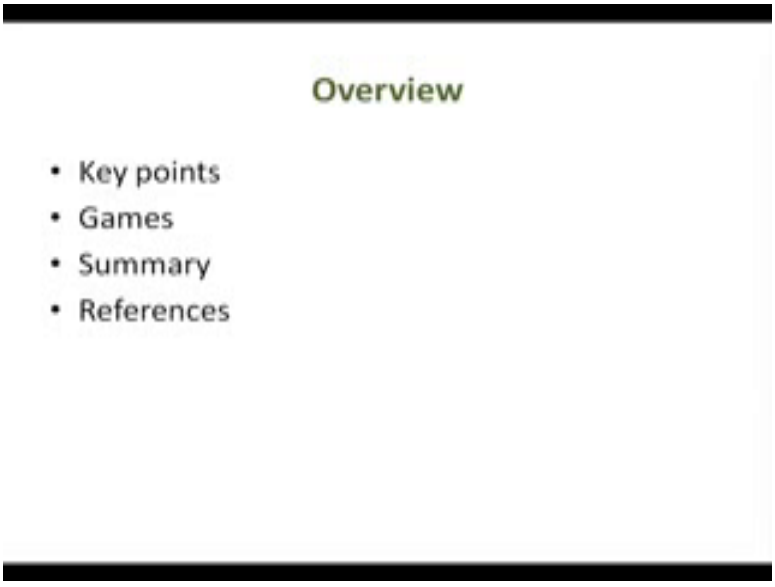

We will start by looking at some key points which kind of emerge from our last discussion and a few additional points. We will be looking at some games and some activities which I will be sharing with you and if required; hand outs can also be provided and summary of the main points followed by the references some of the books that you can follows you can look it up on the web sites and certain web pages where you can access some of the material.

However as I have shared with you; I will be sharing some material along with this video lecture which might help you with any kind of individual or group activity that you might have in mind.

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These are the points to remember; the first thing you need to do is to dissociate the two kinds of thinking; the evaluating thinking from creative thinking because when you are doing any kind of analytical thinking your focus is primarily on what is the correct thing to do, what is the logical sequence of events; does it make sense or not and things like that. But when you are doing generative thinking you are not bothered about these things, you are essential focus is on creation.

However illogical outlined is ridiculous with might see. That is something which we will have to keep in mind. Assumptions need to be questioned. Every time we push the boundaries; some existing assumptions are thrown out of the window. For instance even if you looking at an area like science were reasoning dominates, the logo centric world view which existed till the renaissance told us that the earth is the center of universe. So, obviously, there were certain assumptions which were working and which were very deep rooted because if we looking at things; things seem to be moving around us rather then we moving; and it was only when these assumptions were thrown away that we started moving to at a sun centric concept of the universe.

Even if we are looking at sciences; we find as such a situation arising. Pattern thinking; patterns are important; exploring patterns is significant that is fine, but pattern thinking is a thinking which is based on existing patterns and that can be inimical to creativity or creative ideas, because you are going to move along lines which have already been created by you. The possibility of exploring new lines may not exist. Creating of new perspective is something which you are encouraged do look at things from a different point of view; let us say that some of the best photographs happen to be photographs which start looking at things in a new way.

If we are looking at the (Refer Time: 04:07) history of painting also we find that some of the new dimensions of painting which emerge significantly happen to be of that kind. For instance if you look at European tradition which is known as impressionism; it happen to look at the world in a new way. Earlier paintings were done in studios; in impressionism started looking at painting from life itself. You went outside and you painted what you saw at a specific point of time. You see that this desire to grasp the reality as it is at that particular moment to capture a moment in a photographic way, but as an impression gave rise to a movement all together.

You see that in music also that kind of a thing is happened where you see that particular kind of music has given way to a new kind of music; that is because the way you are looking at music has changed; so new prospective. Negative thinking is essentially something which closes our mind. It sets off panic reactions, it is something which is good for routine work at times, but for creative thinking it closes its a channel because you are in a hurry or there is a kind of flight or fight response, there is a tendency to set channels creative channels, the brain kind of kind of shuts himself and focus is on doing only the minimal activity because it is link to the concept of survival. When fear, anxiety, stress are associated when negative things are associated with that then what happens is that our thinking process is kind of blocked.

Negative thinking can have such causes, but sometimes negative thinking can become an attitude and when it is becomes an attitude; the problem that you face is that you start looking at the dark side of things and you start trying to find reasons why something should not be done. Obviously, the possibilities that we are talking about today and as

well as in the earlier lectures stop appearing in front of us and then of course, taking risks. Because anything new that you are going to do, any exploration that you are doing, any new method you are trying to impose or implement whatever; there is a certain amount of risk involved. It might fail, but then you will have to take that chance and in most cases if it is well thought out it generally succeeds.

Having said that the kind of saying that I had referred to; I have already refer to this book by Van Gundy and some of the tools that we are going to look the at least the first tools are from the same book by Van Gundy which is there is the references. I might try to partially do these experiments with not experiments games with you, but the best thing to do with actually try it out in on your own.

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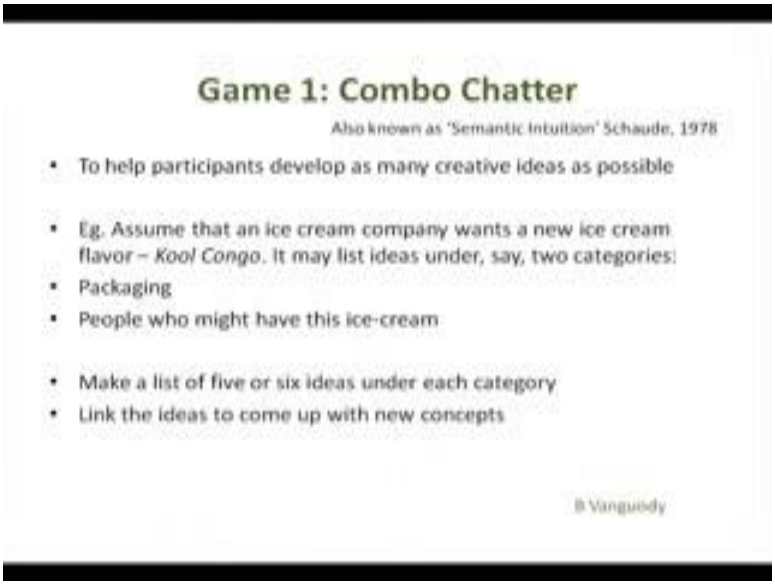

Now, you see that if you remember in the last session we talked about the fact that when you start exploring new channels, when you start exploring new possibilities, when you keep on doing the thing even when the solution has been achieved, it is only then that there is the possibility of coming out something very, very new something, which you have not looked at. Our general tendency and this is something which is again linked to our survival instinct; is that the moment we find the solution is stop there. Human beings like all other animals have been geared, hardwared for survival and when it comes to survival; optimization is something which is a very, very dominant strategy used. That is

why as discussed early heuristic thinking very often is what you have rather than critical or analytical thinking.

Even when that is possible; for instance you have a 200 ml glass containing 200 ml of cold drinks and you have a 500 ml glass containing 200 ml of cold drinks. The general tendency is to pick up the full small glass of cold drinks rather than going for the larger glass which is containing the same amount of cold drinks. This can be strategies; here we do not think there is a heuristic thinking we do not go for analytic thinking the brain optimizes is its resources.

Because the brain optimizes its resources; the moment solution is there. The moment it seems that the problem is over we stop there; we switch to other problems which are facing us. One of this tendency is that we have to create is to keep on thinking of solutions in spite of the fact that we have already got a solution.

Now many of the games that we are talking about right now are essentially about that. Sometimes it becomes difficult; once you have got a solution; the desire to come up with other solutions is lost that motivation is lost. But when at the same time a lot of possible solutions are generated until you please them together you do not know the solutions exist; you keep on being able to generate more number of ideas. Now many of those ideas might were ridiculous, outright, funny, and absolutely unusable.

It is also possible that one or two of them are very, very relevant interesting and new and can be used in meaning full way. If you are looking at the first one; which is known as semantic intuition of developed by Schauder in 1978 and revised Van Gundy. You see that what you can do is let us take the example of an ice cream company which wants to create a new ice cream and let us call it Kool Congo; you have given a name to it.

Now, let us say that we divide two; create two categories and we initially do not try to connect them. The first one is about to packaging and the second one as about people who might have this ice cream.

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About packaging you said generate a set of ideas. So, under packaging you might think of a cool colors, you might think of let us say something which looks like or resembles Congo, you can think of playing around with the word Congo with may be bongo or other musical instruments whatever and you can think of packaging which is very, very different associated with may be ship where somebody is going to that place or an Aeroplane, a flight which is going in that direction something or the other.

What you have done is that you have isolated packaging you are not thinking about the users. Now let us look at the users. So, you might start thinking about user attributes, you might think of user who is thirsty, you might think of a user who is hot, you might think of user who would like to go to Congo, you might think of a user who is trendy because young interested in trying out new flavors. So, you might be interested in a dynamic or a somebody who in adventures kind of a let us say person; now what you have is that you have two sets of ideas and now if you start linking with let us say cool colors with heat you might come off with an interesting idea or something which looks like Congo you can explore it linked up with dynamic young people who are drinking and you can come up with a new set of ideas.

You can look at the Congo bongo thing and you can say fine maybe I can link it off with thirsty and maybe another word which kind of jingles frostty. So, thirst and frost they

kind of match and Congo and bongo they kind of match then maybe you can think of a musical instrument it can have something which creates the ambiance of that place maybe a drum and you might have let us say ice cream package which looks like a drum and you can have it inside and here may be those legends can be there. So, you see that you are able to come up with certainly new ideas which if you are not linked it; if you are isolated them right at the beginning; I am sorry if you are not isolated if you are thought of them together; you may not have come up with because these are discrete ideas

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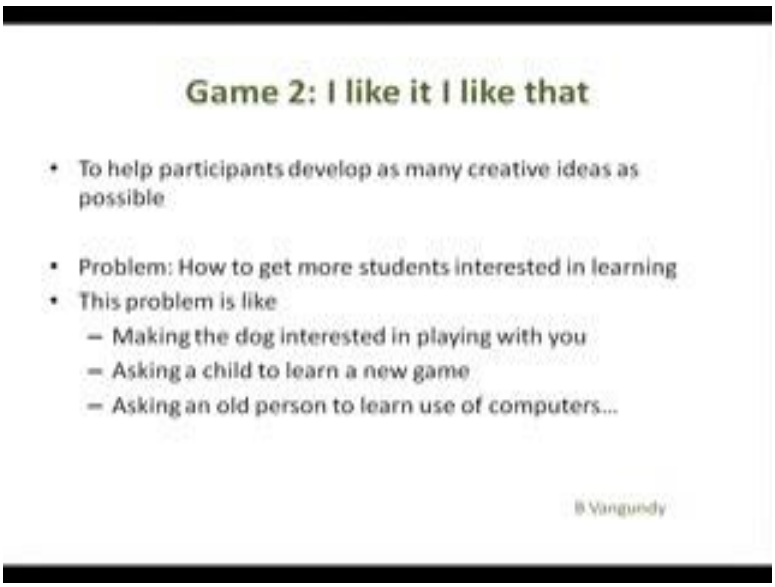

And later on we will be looking at this with free association where this is taken to it is extreme and this is a moderate form of that, but you see that you can take up a problem you can explore it and probably will come up with it is a very interesting solutions to your problem. So, this is one of the examples of again that you can have, you can also have a different kind of a game if you want which is to help participate develop as many creative ideas as possible. I like it; I like that.

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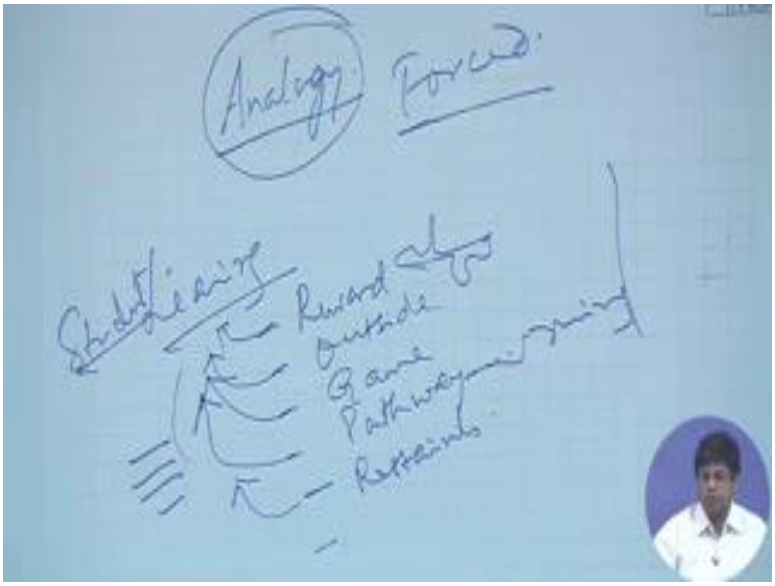

And basically again I will explain that it is like analogy. Now what you have over here is you are trying to create analogy. You have another problem which another technique which is known as forced analogy and I will talk about that a little later, but this is again a variant of that.

Let us say that your basic problems how to get more students interested in learning. So, your main problem is students must learn. But let us say that you say the students learning is very much like may be a dog getting interested to play with you or asking a child to learn a new game, asking an old person to learn to how to use computer and you can make a series of such possible points as is indicated here in power point. Now let us say that are you pick up either many of them or you can pick up even one of them. Let us say that we take up the one which is most ridiculous.

Make a dog interested in playing with you; how to make a dog interested in playing with you? May be you have some reward for it; the dog, may be you go outside because the dog may not be interested to play, you can have a kind of a game that might make the dog interested in playing with you, you might have a pathway where you are playing around a jumping or running a whatever you are doing, you can also have some restraints like the dog on a chain or whatever it is; you can think of reward have we talked about let us say a reward is a bone over here, but you can talk of other things also. So, at least

let us say that 1, 2, 3, 4, 5; I have come up with five ideas you can come up with many other ideas.

Now, let us suddenly, quickly link it to students learning. At least apparently students learning can be rewarded in some way. Student learning can also take outside the class room, students learning can be fun, you can have games, students learning can follow specific pathways, you can mark demark the pathways and link it to how the learning process takes place, you can also have certain restraints on what they can do or not, certain rules governing their entire process for learning. So, that the entire thing that you talked about here; games and all that are restricted, controlled, restrained in a particular way.

You find that just by making a casual relationship between two different contexts; you are able to relate something which happens in one context with something which happens in a different context draw a parallel and use analogies. Analogies are very powerful tools for generating creative ideas and I hope you will try this out as well.

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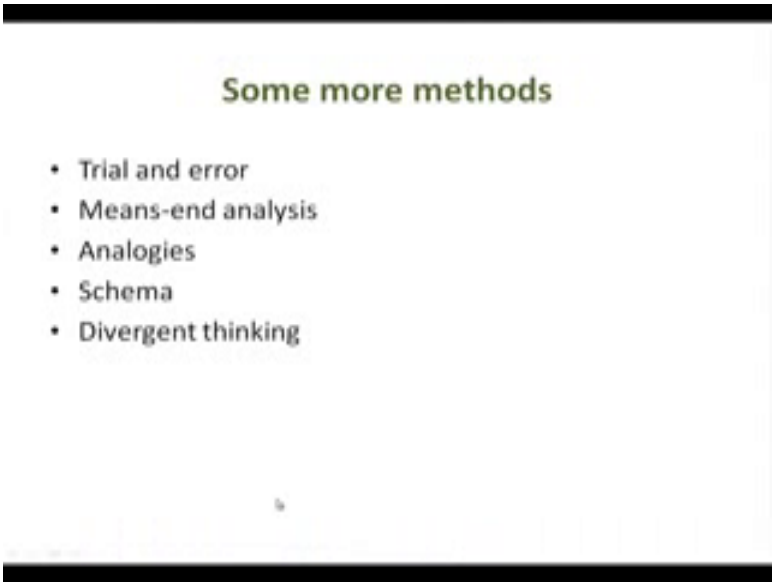

There may be other methods and other some classic matters like trial and error where you keep on trying two things again and again. So, that is always there, but that is something we have already discussed in the context of theorization that trial and error is you keep on trying something until it succeeds; at some point of time you master that

technique, but that kind of learning generally it takes place let us say if you are learning archery, or you are learning how to play tennis or you are trying to be a better cyclist. So, your skills gradually improve; they do not suddenly the ideas they do not come out. So, that is the different kind of thing.

Means end analysis that what do I want, what is there at the end, what are the resources I have, let me bring them together well those things are there. Analogies; I have already discussed and schema is where you have a particular frame work and you use that for you know I mean how you assimilate those things in the context of learning and divergent thinking. Schema can be innovatory in the sense that if we have an existing schema very often learning the movement you want to come up with new ideas; it generally go back to your schema because there is a tendency of the brain trying to do less work; because the brain is attempts general to be as lazy as possible; as I have just discussed with you.

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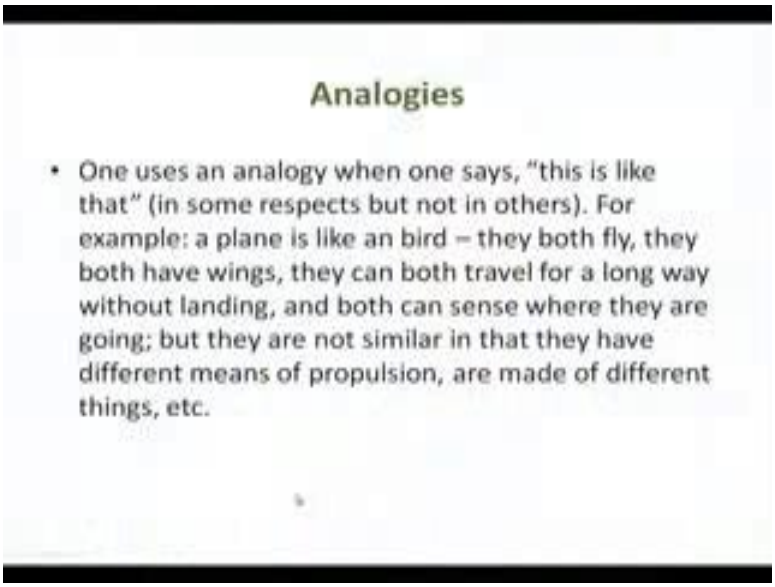

These are some of the points and some of the methods; now we will come to few other methods. Analogy is like this is like that in some sense a plane is like a bird. They both fly, they both have wings, they can both travel for a long way without landing, both can sense where they are going but they not similar in that they have different means of propulsion, are made of different things. So, when you are making allow analogy two

things; very, very different things; if I say that I would like to make an analogy between a pen and human being then it probably very difficult, but then after sometime probably I can come up with some very distant kind of relationship. I can say that the pen has a certain period of life after which it stops writing; human being also has life after which human being is dead.

Pen has a cover and an interior. There is a outer site of the pen and there is something inside the pen, human being body have also something outside and then something inside. So, you see that if you want to go for making creating analogies among very desperate things; we keep on doing that. In fact, in poetry you say that analogy is metaphor, similes; they are I would say the backbone of creativity. You make very startling a relationships; creates very startling relationships, build up very powerful analogies and then you find that wow! that this is very beautiful because you are trying to create, establish a relationship which nobody else had thought of let us say, poet thinks of the sky as a huge blanket which is (Refer Time: 19:45) through the (Refer Time: 19:46) holes; you can see the stars.

Now, this is an analogy and it is so beautiful as a metaphor. In fact, 1 of the poets actually did that (Refer Time: 19:57) in 1 of his very short poems.

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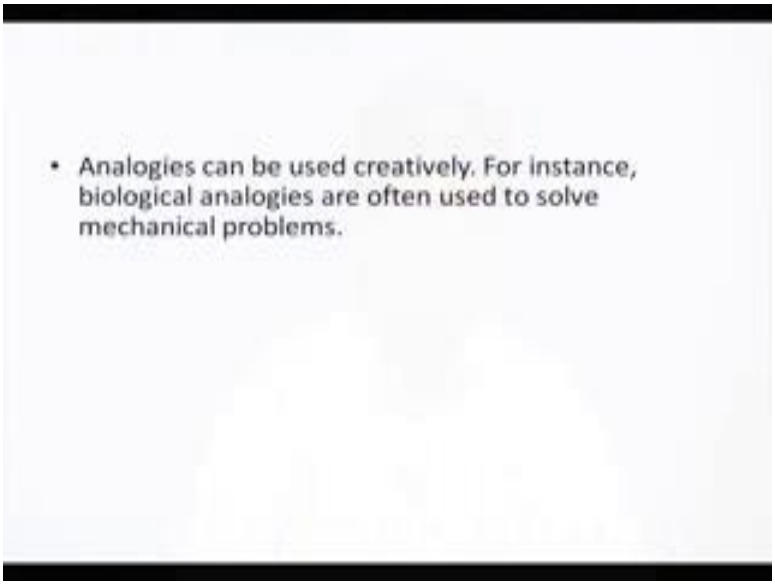

Analogies are very, very powerful, analogies can be used very creatively, you can have biological analogies, you can have analogies a for solving mechanical problems that is in fact how if you are looking at Da Vinci's creations; obviously, he took looked at the flying machine that is birds; in order to develop his ideas of flying machines. In fact, if you are looking at the entire evolution of the flying machine and aeroplanes at least in the early phase, in the evolution, the development started by looking at birds, so from a biological metaphor you start developing mechanical metaphor.

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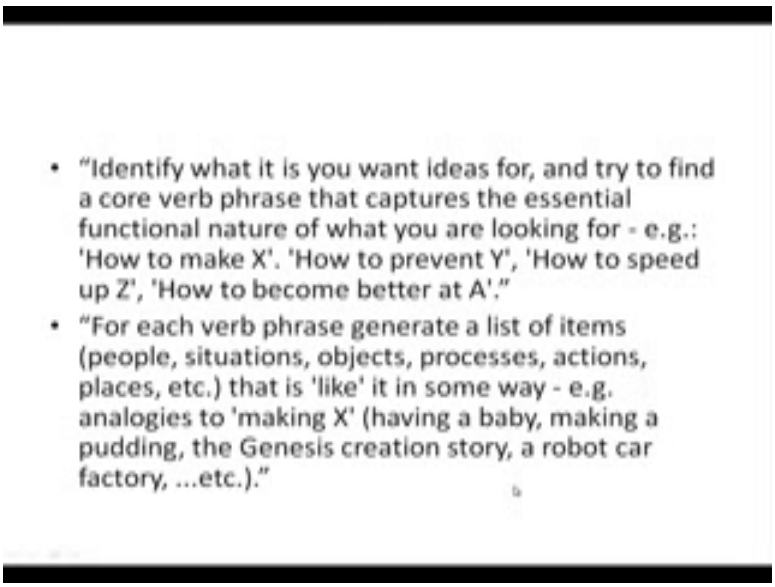

Most of the things focus on that kind of a thing. So, here are some techniques that I have shared with you and this is available in the slides which I am sharing.

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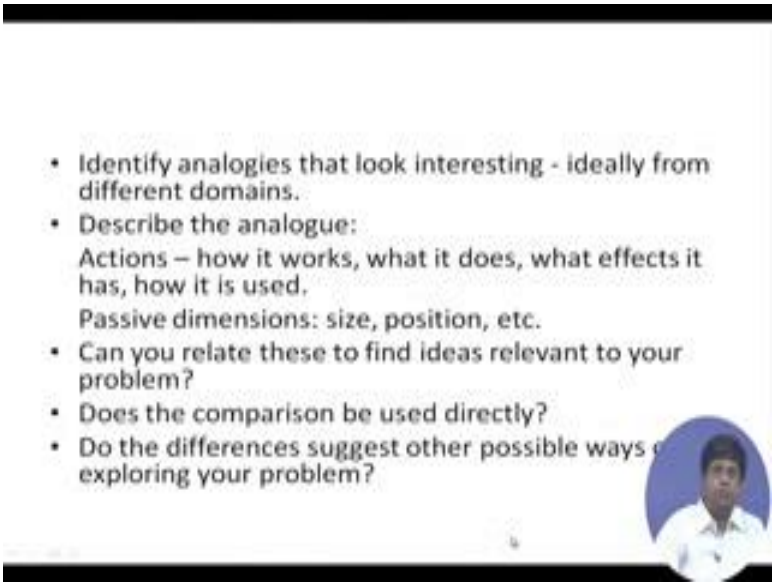

Let us not going to the details of it; I am just making aware of the way that you can explore this.

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Here is another 1, I am sharing with you; attribute listing. Take an existing system or product break it down into small parts or subsets. Identify various ways of getting these parts. Can they be recombined to form new products of systems?

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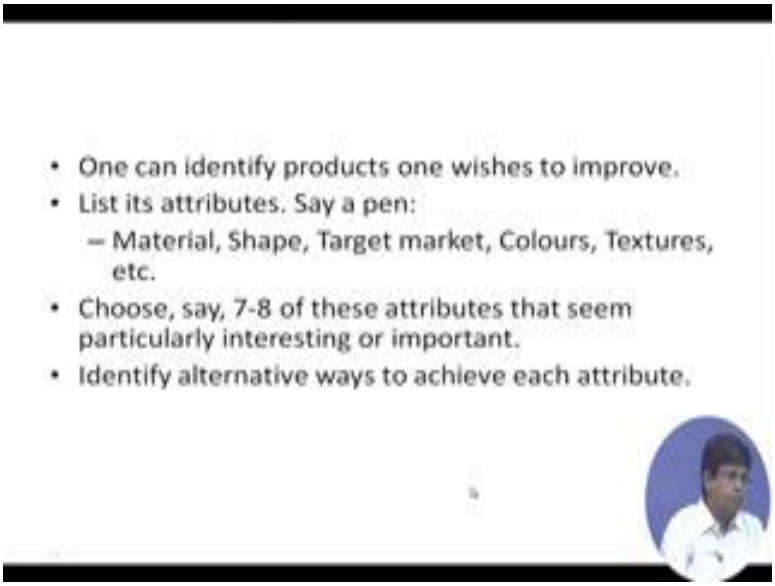

You identify a set of one add even product one wishes to improve list it attributes say pen; material what are the difference kinds of material from which can be? What are the different shapes it can have? What can different targets? What are the different colors it can have, textures? Again you are isolating the different components and if you are making a list you can come up with very interesting ideas. For instance the moment you talk about shape; you come up with all kinds of outlined shapes and you might find that kids may enjoy having let us say pen which looks like Mickey mouse or a pen which looks like a let us say tom and jerry. So, you can; in fact, you have such pens in the market. So, shape is something which gives way to a lot of imagination; if you coming up with interesting ideas colors in the same way the moment I talked about let us say fluorescent colors, a glitter; you come up with interesting ideas or translucent transparent sky color or you see that you start talking about the colors of let us say fabric then texture colored pens an all kinds of new things come up.

Same with textures, material you have been using series of different kinds of material, you can come up with innovations where new kinds of material, let us say biodegradable material; material when the pen you through away the pen after a few days the pen kind of the composes. So, you its recycling is not a problem; green pen you can call it. You can come up with the number of very interesting ideas which can sell in the market.

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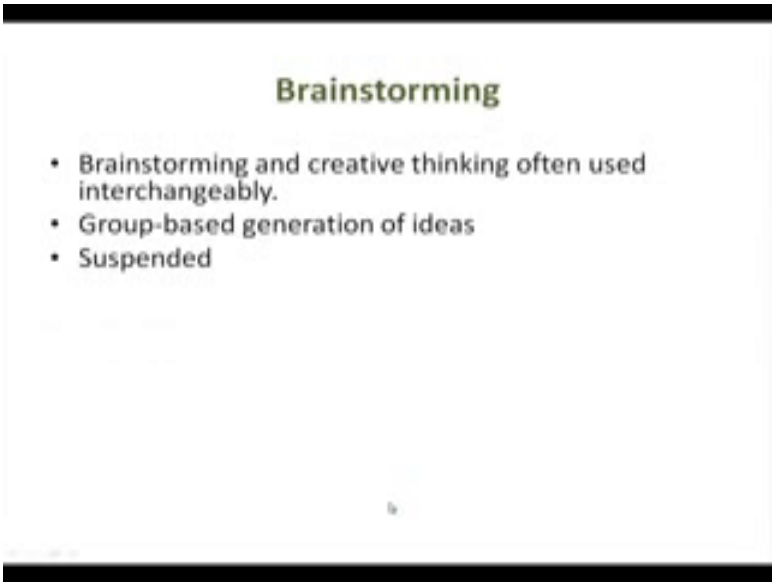

Brainstorming is something else which I would slightly elaborate because this is something with this is a technique which I will just touch up on I will in the slides the details have been given. What exactly are we talking about when we are talking about brainstorming? If you remember right at the beginning we said that you need to differentiate analytical thinking from creative thinking. In the context of brainstorming you are essentially doing divergent illogical, irrational, unreasoned thinking. You are doing what is known as re-association.

You are coming up with any idea under the sun which comes to your mind in relation to a word or any kind of thing. Now new terms which have been introduced are known as brain writing; which is when you see that brainstorming is a vocal activity. In a class or in group people, some people might be very shy and this shy people will not come up with their ideas. They might have been very interesting, very, very exciting ideas. So, brain writing is where anonymously you write down a series of ideas and drop it into a box. Once the pool box is opened since there are no names; nobody knows who the ideas come from, this shy person also express is herself and at the end you come up with start discussing this ideas.

Now, brainstorming; this is one part of brainstorming and then obviously after brainstorming has been completed you try to piece the things together and identify what

exactly is happening and you go for analytical thinking. So, that you can converge and come up with a usable kind of material at the end of it.

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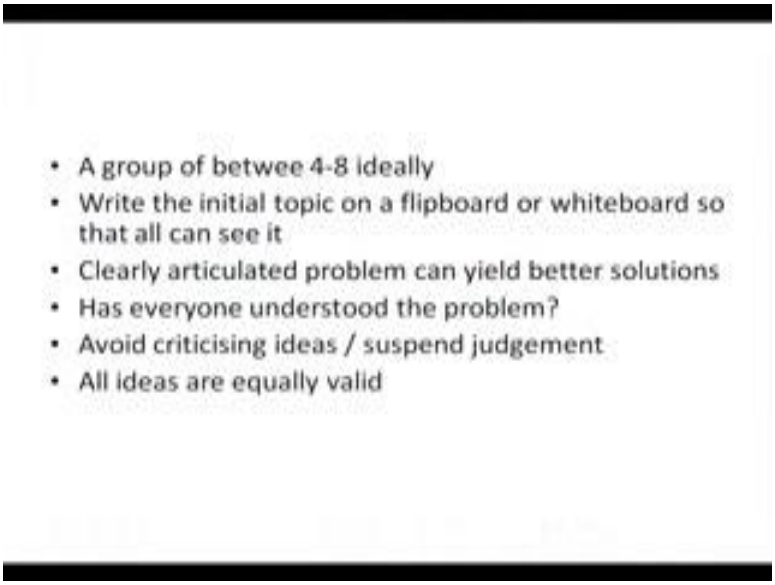

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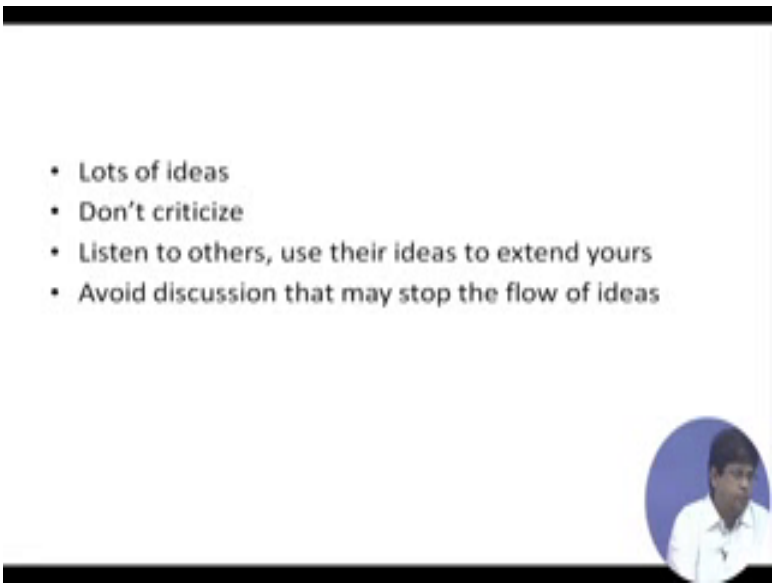

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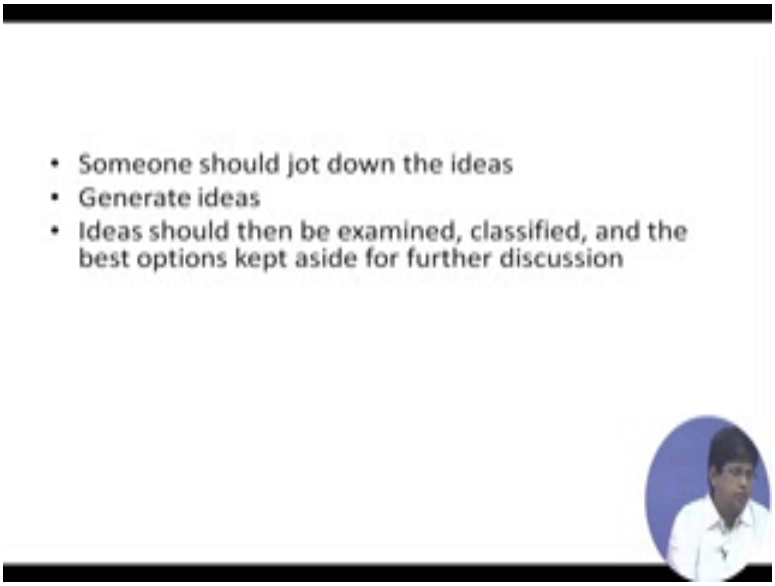

Suspension of your belief, rationality and as I told you can look at this slides for getting how to do it.

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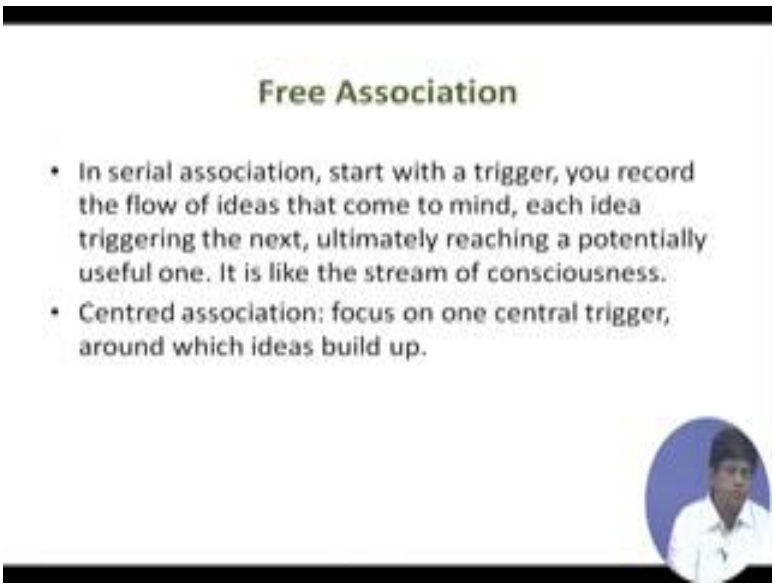

Free association is again something where in relation to a particular word as I had told you doing the first task with did together; any ideas that you comes to you are mind you just making a list of that. So, if I have an idea how to make a class more interesting;

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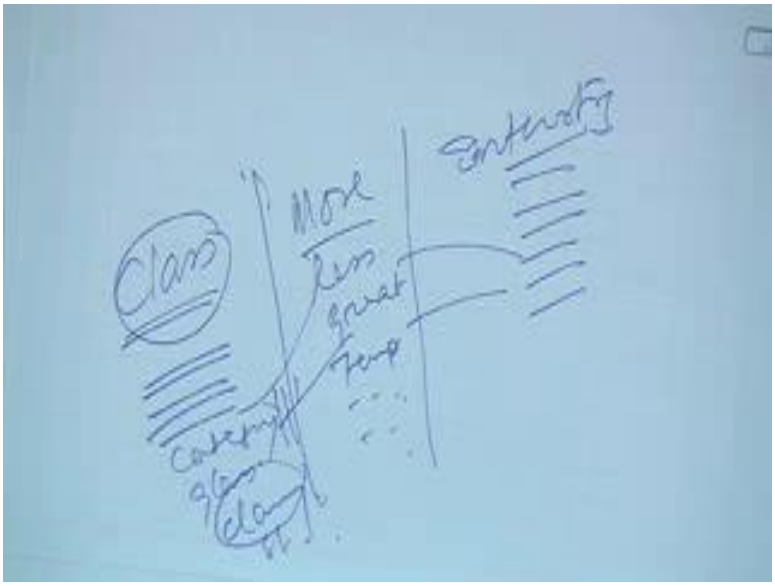

Then I separate these words into the basic components class; I make it into more let us have made it into interesting.

I have three words and when I start free association anything that comes under the category of any what that comes to my mind when I talk about to class, I might class, I might say category, class I might say glass because it sounds close to that, class I might say classy, class I might say students, I can come up with many isolated this and I talk about more; more I can say less, I can; I talk about great temptation, I can talk about any list of ideas, interesting I can come up with many other ideas. Now what is basically happening over here is that these ideas are generated in isolation and then you start linking. You try to make connections; you see that classy might have something to do at some point of time with class. Class also happens to have different categories of students.

You see that you come up with next new relationships, new possibilities of linkages that you can use and class can have less number of students, classes can be great, classes, classes more is a temptation either may be temptation to relive classes. So, this way you can start linking the ideas and then come up with some if not one may be five different solutions which you have and some of them might seem idiotic but 1 or 2 might actually work and you are coming up, you are generating new ideas because you are not

following the main route; the route which your mind, this schema, your basic orientation, your logic and your learning throughout this many days have taught you. These have taught you certain things. So, the moment you try to solve it; these things will come to your mind. It is a classroom; I take classes, in classes this is what general happens. So, you start thinking along your experience what you have learned all that. So, you are working along a beaten path, you know this particular path, but if you take side paths which have been not discovered where the links have not been met; you might find that there are very interesting explorations to be made, discoveries to be made.

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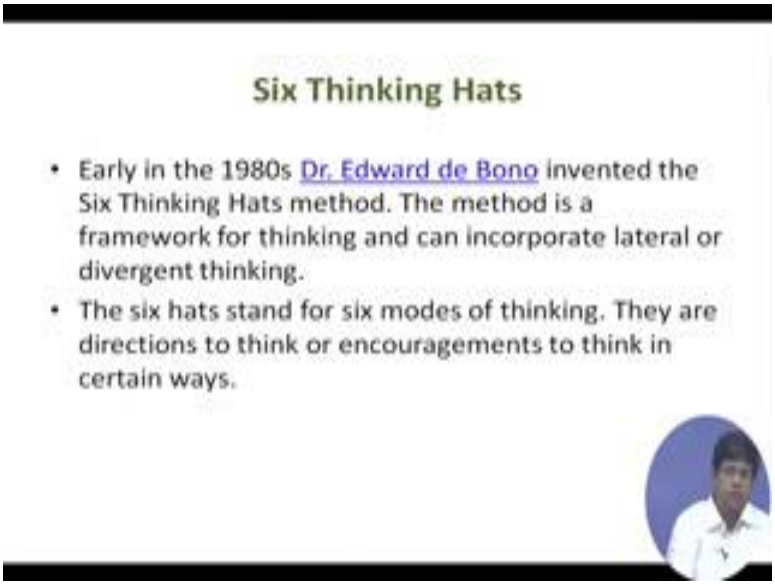

Few association again I said that they can be elaborated. The last thing I will be doing with you is quickly touch upon another kind of thinking which is pretty popular and successful. In the last section when I talked to you about creativity in the context of theories; I told that there many theories of about thinking and you see that De Bono has been criticized for some of his ideas in terms of how useful they are in the context of all its academic thinking, but in the context of creative thinking De Bono; so, ideas usually have been very successful have been used both in the industry and have been explored to a certain extend in the context of academy as well.

From the context of and the from the perspective of soft skills; I have a feeling that this also all they little elaborate is something which can happen which can be pretty

meaningful and I am sure that there would be many websites where these techniques are elaborated and I hope they will convince you of; the relevance of these techniques six thinking hats is about six different kinds of thinking which actually take place when we are thinking simultaneously or in sequence, but which are isolated here. If I am thinking about a problem may be all the thinking; different kinds of thinking come together I say that what have what if I do this? Then immediately I say that no, this is a ridiculous idea; let me not think about it

Now, what is happening is that this particular ridiculous kind of thinking which could have succeeded at some point time has been kind of curved. When vaccines where first introduced in Europe; you find that many people founded ridiculous that diseased organism is being injected into a healthy body. It sounded absurd, it sound ridiculous, outrageous, but you see that the fact that it was the pioneer; the inventor continued with that was what kind of give rise to a total revolution in the field of immunization. So, you see that different kinds of thinking have their different spaces and six thinking hats permits you to think in these different spaces independently without fearing that the other kind of thinking will interpose.

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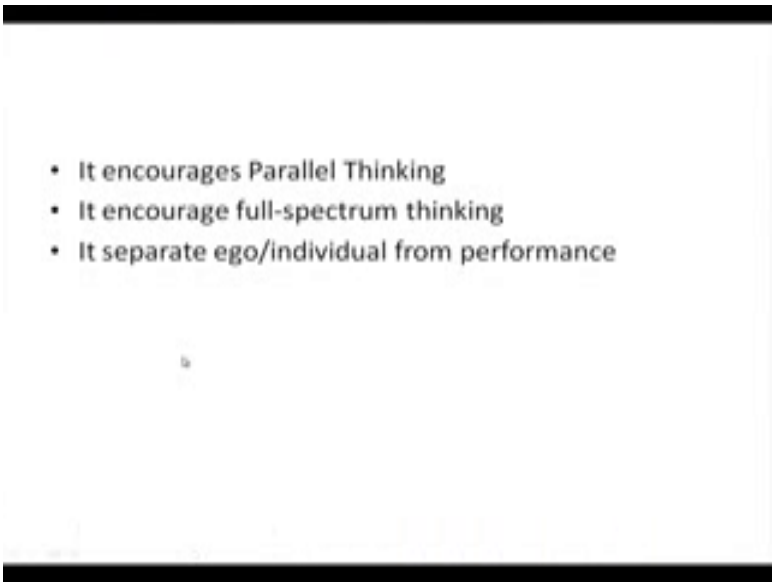

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Let us say that the to begin with when you pose the problem or you come up with a problem; you start by covering all the facts, figures, information needs and gaps; drop all arguments you are not looking at what will happen what is good, what is bad anything of that kind; you are just looking at the facts.

The class is not interested. You are not asking the question, why is the glass not interesting? How to make it more interesting? Should I go for response from the students? No, you are not thinking about things. What are the things about this class which are not interesting? Making a list of it, without thinking any kind of facts, facts and only facts.

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This is where you are you again thinking rationally, you are talking about a gut feeling, your impulse, any outrageous impulsive kind of think that comes your mind the kind of reassociative thinking we have talking about all this while is what you encourage judgment, caution, logical.

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Now, this is where after you say ok this is the problem one has to be very careful, classrooms are very sensitive places, students have very sensitive minds, they can be

manipulated, they can feel outraged, they injustice can be done to them. So, one has to be very careful. So, you make a list those qualities but you are keeping it separately.

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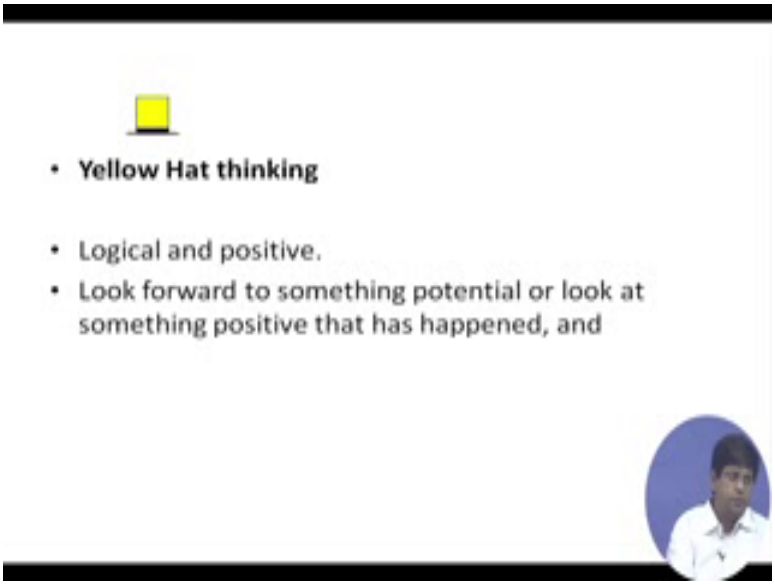

Logical and positive; now you are doing something kind of thing ok this will work even if it may not work it is still logical. So, hopefully that it will work with the positive attitude you are doing a little bit of logical thinking.

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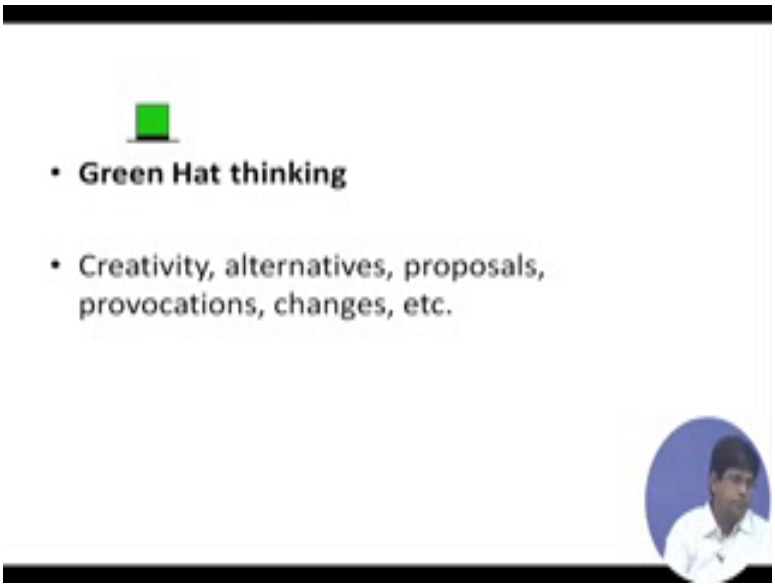

You are doing creative alternatives, possibilities, wide range of possibilities, alternatives, change provocation, critical argumentation whatever it is; you are doing that, but essentially creativity that is what you are highlighting over here and then this is the last kind of thinking where the other five kinds of thinking are brought together and at no point of time are you isolating or saying that this individual said that you are just looking at the thoughts, the difference thoughts, different kinds of thought processes which have been involved rather than looking at the thinkers who have done this thought.

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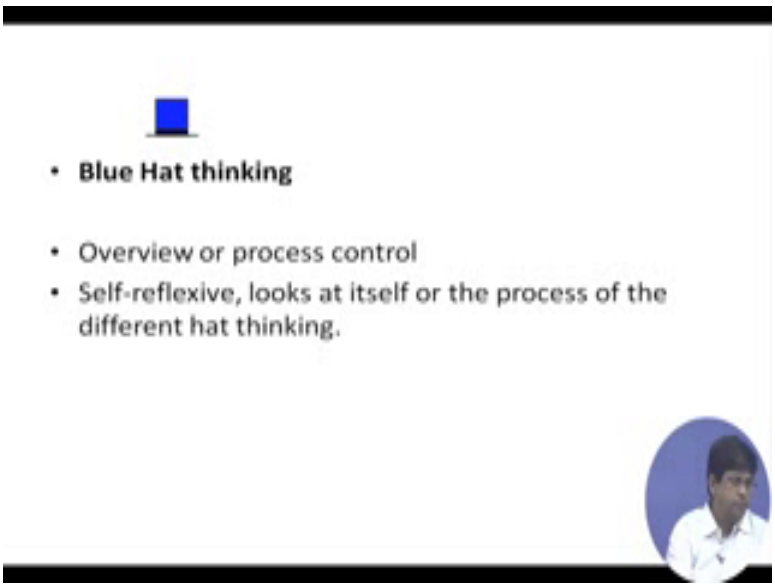

I have under I mean explored or thought in this particular way. The idea is to look at the ideas rather than the people who have generated the ideas to delink people from processes, people from problems; that way a certain degree of detachment is something which you are able to develop and you might to able to solve the problem in the more interesting, more meaningful way.

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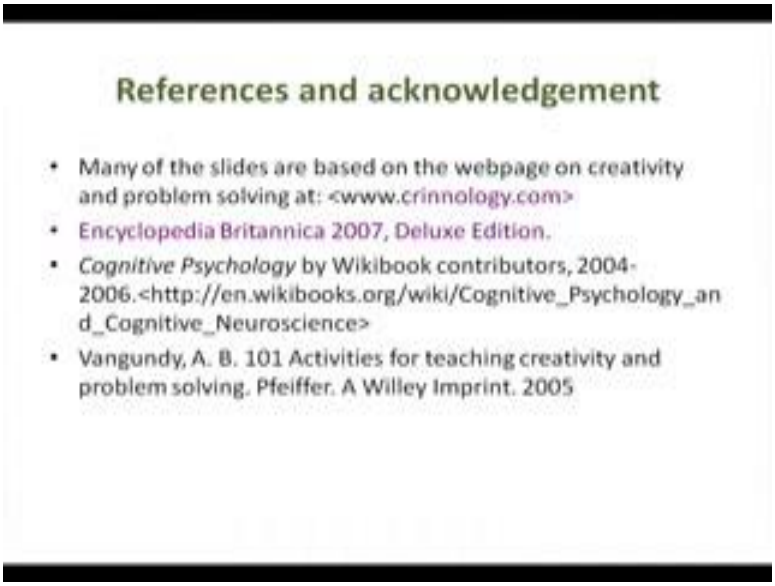

Here some of the references I will be sharing some more in the slides and I have a feeling that this to some up; what you have done so far is that we have looked at the basic concept of creativity, we have looked at theories of creativity, we have also looked at some of the basic do and don'ts and we have also tried out a few tools ourselves, we are now aware of five or six difference tools and if you start googling you will find that hundreds of tools; difference tools are available. Now it is important to find out which tool fits you, which tool you are comfortable with; it is also important to find out which tools you can use individually and which tools you can use an in groups and then may be try them out.

I hope that this will be very meaningful in many contexts where you will be dealing with other people, you have to come up with new ideas as quickly as possible and I hope that some of these things if you did not know above them will help you meaningfully; if you knew about them then at least it reinforces your conviction that these tools work.

Thank you very much.