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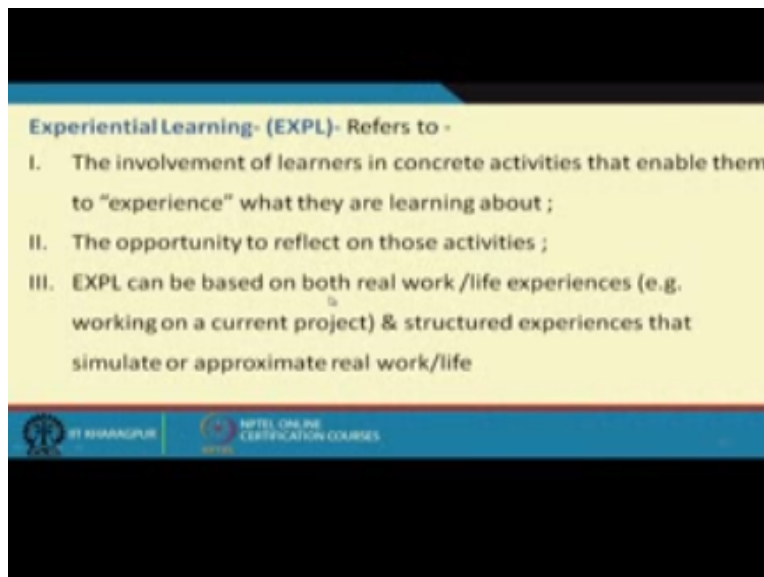
**Course
On
Education leadership**

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**Lecture 30 innovative pedagogy and technology
For learning (condt)**

Welcome viewers once again to this NPTEL course on education listening leadership and the last class we are discussing about innovative pedagogy and the technology for enhancing teaching learning programs and enhancing the effectiveness so we have already discussed about scaffolding metacognition and cognitive apprenticeship.

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So today we will discuss about one more technique of innovative pedagogy that is called experiential training experience and learning so experience and learning primarily the force to the individuals involvement in the learning experiences in the real life context so it refers to the involvement of learners in concrete activities that enable them to experience what they are

learning about it is more about learning by doing in the real life situation in the real life context by performing a task solving a problem taking up an assignment or doing a project.

So that the individual learner gets the opportunity to learn so at the same time he is experiencing the whole situation and he is learning by doing So this is more about learning in the learning and experiencing the whole knowledge acquisition know how both the declarative knowledge and the procedural knowledge conditional knowledge in the context of real life problem situations so it also refers to the opportunity to reflect on those activities.

So when were applying the theoretical knowledge in the practical context in a practical situation and try to solve the problems so we definitely experiment certain ideas and thoughts and hypotheses and so when we are applying all these things we get the opportunity to reflect upon into analyze on our own performance to retrospectively evaluate with the things and try to you know try to map whether the tech map line techniques are suitable for the particular context or not.

Whether we have thought the strategies you have selected at actually optimum are actually adoptable to the particular situation or not for we get the opportunity to reflect on those activities also as well as improving and updating our experiential knowledge and experience and you know Newt and we also learn new techniques which may be helpful in the future learning situations therefore if experience and learning can be based on both the real work or the life experiences.

For example working on a current project working on a if your assignment it may be a social-economic it may be purely social enterprise related or it may be you know solving any kind of technical problems so and it takes place in a real-life context and we will structured experiences that simulate are approximate the real-life work so that power project or the working project forth assignment is either embedded in the real-life situation in the or in a particular work set up based on the structure experiences that simulate or approximate the work of the lies if it is either.

If it is a real place in the real work life work place situation then it is structured in such a way that it exactly map the real-life experiences similar there are real-life experiences or maybe an insight or actually it is really embedded in the app of your life context so I have the experience of learning again it applies to the technical as well as the non technical issues we can that means we can get up the project we can complete an assignment we can experiment on certain lab

techniques being executed in the real life situation both the technical and the not non-technical skills or maybe some soft skills like you know marketing scales interpersonal skills communication skills or emotional intelligence skills in the real life you.

So experience and learning applies to both the technical knowledge as well as the non technical knowledge so again experience and learning activity can because for all dome world domains like experience and learning can be based on both on the cognitive domain like when we are analyzing the highly intellectual or abstract concepts try to experiment on it try to verifies implications or in the real-life context either in the cognitive domain like understanding and applying the new concepts intellectual concepts.

In the real life situation or any kind of behavior domain slide related to different kind of skills like problem-solving skills collaborative skills communication skills or you know persuasion skill and how we can apply it in the real life context to motivate people to persuade people then again it also relates to affective domain affective domain like now when we do market research regarding people's beliefs regarding stakeholders you know their interest their future you know future interest or their problems they are facing now their mindset their you know stereotypes or prejudices etc.

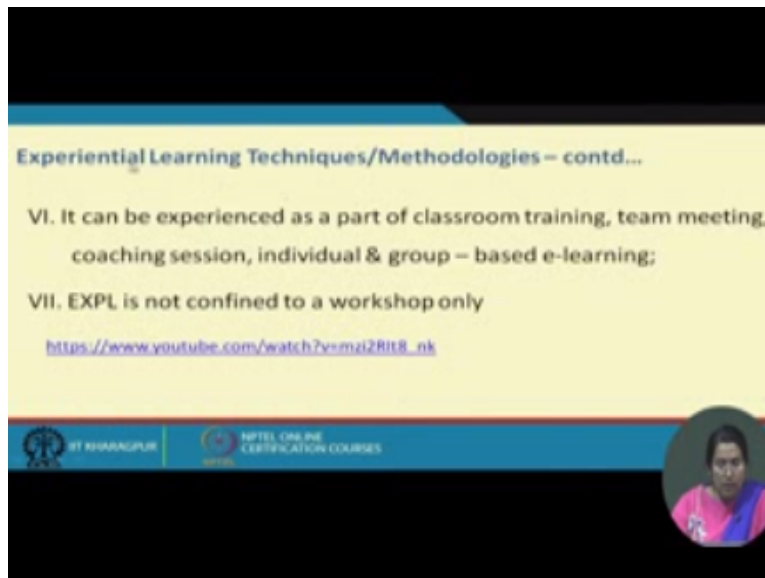
So experience learning can be related to any domain any aspects of human behaviorist may be related to cognitive behavioral as well as the affective domain so these are some of the examples of experience and learning like when wed the internship or gain a lot again with a type of work experience when were on the jobs kind of internship data on the job assignments even when we go for her study through a field experience or anything related to social experiences or you not for the role forth rural development scheme or for the super W schema for any kind of the agricultural project etc.

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• On the job assignments	• Games
• Field experiences	• Simulations
• Action Learning Projects	• Visualization
• Creative Play	• Storytelling
• Role Play	• Improvisation
• Problem - based learning	• Adventure Activities

So field experiences also comes under these experiential learning action learning projects when the total complete positive based on activities and learning activities and that and learning by doing and you know constructing the project demonstrating with and then getting the feedback creative play some kind of imaginary play is a creative play role-play like playing the different kinds of roles in one-act plays or dramas or the you know simulated games similarly problem-based learning when the learning is primarily based on the problematic situations picking up problem trying to solve.

It and trying to find out implications the real-life context there are different kinds of games simulations similarly visualization storytelling method then information I or adventures activities all these kinds of modes and techniques and methodologies are involved with experiential learning again experiential learning can also take place as a part of classroom training team meeting in committing coaching session individual and the group based in learning.
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So when we are discussing in the face-to-face communication mode in the real-life situation in the real lab classroom situation so it is also experience and learning because when the teacher and students are going to interact with each other with all the students that engage in active learning or doing some group assignment group discussion or hands-on activities it is also experience a learning team meeting team gathering coaching session.

Also loaded in choral coaching one-to-one coaching or one to group coaching individual and group this e-learning even though the students are in genuine learning mode but they are again interacting among the group member either virtually or into your life for discussion in the forum for group learning activities etc.

So that is I experience the learning is very broad in its scope to need aspects so its not confined to only workshops only on the job assignment or only level eight my work or only problem-solving situation which has a scope and opportunity it right is very fast and it accommodates different kinds of learning experiences both theoretical as well as up oriented things and solving the real-life problems for all kinds of learning experiences which involve action thought and action and interacting with and reflecting on it.

Comes under the experience of learning mythology so here we can see one of one video a week looks better explains how technology and innovative pedagogy helps us in our teaching learning experiences teachers are finding at using different classroom technologies like tablet computers digital video iPods and videogames are great tools for helping students learn while there are

some naysayers who bring up some negative effects of Technology and education mainly budgetary reasons using new technologies is the future of the education system.

The following reasons should silence the naysayer and help heed the wisdom from Carol Nussbaum Beach which says teachers will not be replaced by technology but teachers who do not use technology will be replaced by those of youth first reason to use technology in the classroom is because students love it students love using new technologies whether it's the cool factor or just genuine interest in new technology.

It allows the future to vary the activities of the day and engage students there's no commandment for education that says thou shalt not have fun students spend hours using technology like computers and television when they get home from school why not engage them through their favorite mediums number two it engages the four key components to learning which are active engagement participation in groups frequent interaction and feedback and connection to real world experts to amplify digital iPad listening Center.

For requirements also number three professional development using new technologies allows students to learn another skill set which will help them in the marketplace how many jobs need basic computing skills let alone advanced computing skills anytime the teacher can encourage student to learn through technology they kill two birds with one stone the tech industry is only getting bigger encourage your students to know and understand technology.

So that they can be the tech leaders of the future with the power of the Internet knowing how to use a simple piece of technology can turn an aspiring singer into Justin Bieber whose mom uploaded YouTube videos of him singing which ultimately led to this fame or it could turn a hilarious prankster into a YouTube star and advanced master for recently used an amplified sound cruiser PA system in Lotus videos number four it makes life easier for teachers.

Have to juggle a variety of tasks outside of teaching including planning lessons grading meeting with parents and administrative work why not help yourself out and put tests online those students can instantly see their grades instead of spending valuable time reading number five it improves test scores a benefit of engaging students through technology and media is allowing them to work at their own pace and not held back by students who learn at a slower rate.

This can allow gifted students to progress double grade levels ahead of their peers over the course of year another proof of improved test scores comes from reaching different learning styles through the use of technology the use of electronic drilling in education can help students learn quickly and provide incentives like games for them to keep progressing number six helps students with low attention spans students with a DD orated can be aided through use of technology by mixing up.

The learning process with different methods and through providing them engaging activities to keep their interest technology is a favorite among teachers who teach in ESL classrooms or in special education settings 7 learn from the experts with an increasing amount of free resources available on the internet you can engage your students with content from the smartest and best teachers in the world 8 encourages homework wait a minute there's something that actually encourages students to do homework.

Some are finding that flipped classroom approach where homework is done at school and lectures are viewed online at home is the best model because it allows teachers to give real time homework help and lecture off the clock this can help students overcome barriers quickly by removing frustration and negative feelings or emotions that develop in the learning process number nine save money all those using new technology normally has initial investment.

It will save schools money by multiplying a number of teachers in classroom instead of having one teacher teaching 20 students adding technology like a school listening Center or tablet computer will increase the number of functional teachers in your classroom and free up the real teacher to answer questions and help students with the ability to use free online content teachers will not need to spend as much money on curriculum resources 10 remove obstacles.

Do you have students who have trouble hearing using a classroom amplifier system can allow teachers to amplify their voices and allow teachers to speak at a comfortable level one hundred percent of teachers in a recent study so that it was easier to get the attention of the whole class and 100percent of teachers says that they spent less time managing behavior and more time focusing on curriculum.

This is just one of many examples of how technology can remove obstacles from the learning process amplified sound systems manufactures and sells portable sound systems along with

lecterns and podiums with built in sound systems that are perfect for classrooms the pinnacle multimedia lecturing and iPod portabella system are great products for school settings that have a variety of uses both indoors and out for more information please visit amply calm or give us a call and let us extend your voice.

So now we will discuss about collaborative learning otherwise known as the team learning so it is also an innovative mode of learning and teaching learning M concepts the collaborative learning it promotes the conceptual understanding through mutually shared cognition so as the name implies it promotes a conceptual understanding through mutual assured cognition like when the members are within the group or the member team members when they collaborate among themselves do not only share the knowledge.

But they try to conceptually clarify all the concepts or the vital components or the aspects involved in a particular topic or particular domain or problem and etcetera so it promotes the conceptual understanding through mutually shared Commission's all the members in between in the collaborative learning situation very share their knowledge to share the skills and they share their ideas and thoughts to understand the actual topic of the content they are having a 10 so promote the conceptual understanding.

So they better strengthen their conceptual understanding of the topic or the issuer the content by mutually sharing the knowledge ideas and competences so when they discuss among themselves so each member each team members can then either her would not condone our conceptual understanding of the concepts again collaborative learning is the process of building and maintaining the share conception of a problem or that as.

So when the selected problem or thetas so they build up the process where they show maintain and the share the conception of the problem what eating each and every individual member thinks about the that problems their perspectives their ideas their outlooks regarding that problem so they open the disks it with the members team members they simply share it without that so they mutually share their ideas and thoughts about that problem the task distributing the responsibility occurs the members after discussing the different aspects of the problem and their perspectives.

Their views about that problem then they distribute the different responsibilities among the team members like who is going to do what are we is going to take off which kind of job so across the

members of the group sharing the expertise and desolate of the or this scientist responsibility to different team members depending on their expertise maybe some are some people are some members are Avery good in technical expertise so they take up the technical aspect some others are very good in interpersonal.

Or Public Relation or the management so accordingly they distribute the responsibilities among the members sharing their expertise and mutually constructing the cognition so they collectively they mutually they collaboratively based on the knowledge and the cognition about that problem how-to solve it how to resolve it how to proceed how to probate the action plan etcetera etc.

So they share their view the undersea said their understanding and perspective about thetas the problem we discuss among this in themselves they share their expertise they distribute the responsibilities among the members and then usually construct and it is if it is required then construct reconstruct and strengthen their collective cognition collective knowledge collective output and negotiation is the key to determine the group or the team interactions pattern of discourse.

And the team members behavior so here in order to make the team learning collaborative learning a successful one negotiation is the team is not just communicating each other communicating each member what they think what they appreciate what they believe or what they know they have the expertise Acer is not just about communicating about their eats and birds and what apes and birds and what strengths and weaknesses and the plans and programs whatever competency.

They are having it's not just about communicating to each member each other but to network it because ultimately they have to the grossest among themselves so he is going to do what how they can collaborate how they can design the whole action plan and perform the whole path so that it can be manifested in the real-life context so it is all this all the things it depends on the negotiation for the negotiation skill the negotiation skill of each and every member.

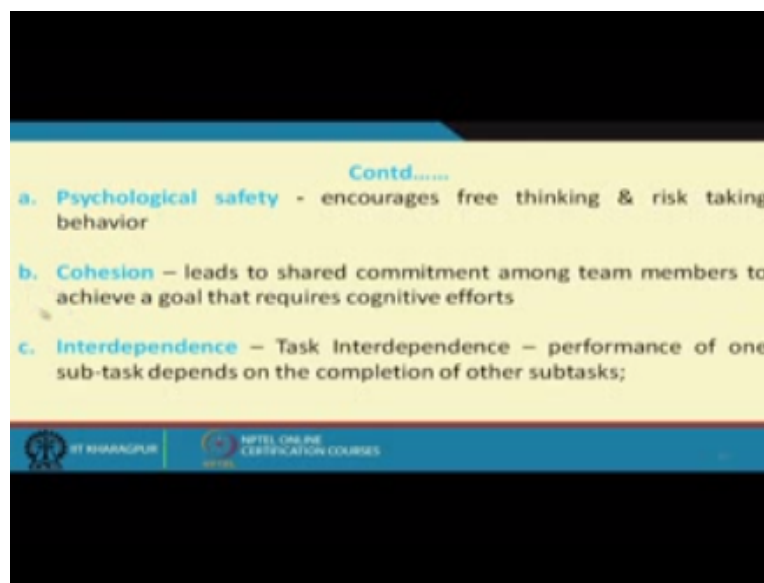
Because ultimately it has to Bethe consensus effort of every member to agree with each other's opinion each other's perspectives mutually agree and we shall construct the cognition and resolve the issue first and negotiate is the negotiations the most important key or vital component

of this all the schema interactions a pattern of discourse dialogue communication and the team learning behavior to make it a successful one.

So then again construction core construction of meaning through active listening again as a negotiation is important here are other interpersonal skill communication skills like listening to active listening if not just and I am just stating my viewers I am giving my opinion etcetera but what others are saying what others are you are asking what others are viewing about particular thing.

So active listening is also very important active listening then only we can understand of this perspective grasping the meaning after active listening again it is grafting their meaning by understanding their perspective by understanding the deep meaning and by understanding different kinds of the staff they are discerning different types of the problems and explaining the emerging meaning and some of these tacit Matata you know experiences or tefik learning outcomes also there.

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So which may not be very you know very conspicuous at the outset butte inherent meaning or it is in the implicit sir you know implicit meaning of the whole situation so unless or until we actively listen try to grasp the meaning both the you know both the phase where face meaning and the underlying meaning implicit and explicit meaning and explaining the emerging meaning out of and explaining the whole situation to each other.

So constructive conflict to mutually share as the members are engaged in active listening negotiation communication and we are trying to grasp the meaning and find out its implicit meaning inherent meaning and find out the underlying mechanisms to resolve it so not only the mutually share the cognition but they must then mutually construct the cognition construct the knowledge so in this process they may you know face some kind of conflict some kind of a demand not exactly conflict in terms of we can say task conflict or the process conflict or we can say it is related to tasks.

So that means how to resolve them or what should be the best approach regarding the you know procedural knowledge or the conditional knowledge etc so that is called a that is the constructive conflict the conflict which facilitates the whole process consider the conflict which facilitates the learning outcome or the knowledge gained you know the learning and acquisition that is called the constructive conflicts constructive consumer conflict facilitate this mutually share cognition they not only mutually share the cognition.

But they also construct the knowledge and cognition the co-construct the knowledge and cognition and in this process constructive conflict facilitates or you can see it enhances and improves the members performance so groups believe about the interpersonal context here another important internal factor is that groups beliefs that means group dynamics also plays a very vital role group dynamics especially in about the interpersonal relationship.

Among the members and like here group or groups belief or Interpol beliefs about the interpersonal issues interpersonal context comparisons of the three factors on a psychological subject cohesion and interdependence so we can say that these are the three important dimensions of the group dynamics so what is this I close it'll 50 psychological 50 encourages the free thinking and the risk-taking behavior when the group member stein members are well tired.

With well meet her with each other or it is you will need group and third set and when the group members are very much for you no I feel like a -or aligned to each other they are very much the sense of belongingness is very high so they feel safe in the group and they feel very you know very safe and open in expressing their thoughts ideas so it encourages them to freely express their ideas even Khan Yuvandetainee dilemmas or the opinions or the you know some remarks or

criticisms whatever may be so they don't shy away or they don't feel threatened to our children to express their views etc.

Psychological safety is ensured in this game context in this group context where the group dynamics is very strong that with each main group members team members are very much strongly and linked associated to each other that group belief and that belongingness their group identity is very strong so this so they get some sort of the psychological safety secure Ness that is called a security sense of security which encourages them motivate them for the free thinking and so and they have to take up any kind of risk.

So here psychological safety also encourages risk-taking behavior when you are you feel that nobody's against me and very safe in this group I am well protect protected and not only my job and myself-esteem are protected but my individuality my that means everything is a very secured and protected in this group so I can't dare to take up any risk so it encourages the risk-taking behavior - psychological 50 encourages the free thinking a risk-taking behavior then comes cohesion that is the togetherness.

To get the nest that bonding so it leads to shared commitment among the team members so that combined commitment among the team members to achieve a goal that requires the cognitive effort for here cohesion that is the togetherness the strength the strength of unity and belonging Ness of the team members. So when they share this cohesion so they are all the members that we committed to each other deeply committed to group a deeply committed to the team members deeply committed.

To the group goals deeply committed to the teamtaskinta and they're willing to share that commitment they are willing to make effort dedicate their time and resources and the effort to achieve that goal and which of course it requires a lot of cognitive effort in case of each and every individual members so they are released to willing to dedicate willing to give their not only effort time resources but share that commitment with the team members to achieve that core then come interdependences interdependence is over two type of interdependence one is the task are interdependent.

And another is the outcome interdependences here task interdependence is the performance of one sub-tab depend on the completion of the sub task like for example suppose when the group

members is shared among themselves the responsibilities of different assignments to different assignments and distribute among the members to individually do it complete it and then collaborate with other team members sphere some if the task is a calm very complex and time-consuming and agree on the first side.

So definitely it is going to be distributed divided subdivided among the group members according to its sub task according to its nature according to its you know time require etcetera so that is the task interdependence unless and until one subclass or the five sub staff and completed independently so it cannot be joined together to complete the whole task so task interdependence reinforcements of one sub tough depend on the completion of the other subtract.

When five sub tasks or assignments recompleted and put together then contain only the complete whole task can be completed so that is a task interdependence next is of an outcome interdependence outcome individuals extent to which team members and personal benefits and cost depend on the successful goal attainments at the end outcome interdependence it decides to what extent that is they dedicate at that time is also set veteran they forego their personal benefits or they sacrifice their personal benefits.

And the cross and are committed and willing to complete the successful goal for the goal and they are very open minded and in accepting that challenges and they are willing to sacrifice their personal comfort and they are willing to sacrifice maybe time and resources or money whatever but they are dedicated to complete that goal. So that is the outcome interdependence no wall the team members are here now more focused on the outcome and goal achievement outcome and total success then comes a group potency group potency is the self efficacy of the individual members group that means a group efficacy team performance outcomes groups collective belief of the role achievement targets and the capabilities.


So group potential depends on individual members self-efficacy like each and individual member on one the thing about themselves their self efficacy their expertise their abilities their capabilities etcetera each member think that yes I can do this or you can do this or she can do that so it is at the each individual members belief about their own capabilities as well as the group efficacy taken together quanta coop can do but back group efficacy level is that how was work and now complicate end of the capable enough to deal.

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Collaborative Learning (Team Learning) – contd...

- c. Outcome interdependence – the extent to which team members' personal benefits & costs depend on successful goal attainment by other members (more open-mindedness)
- d. **Group Potency** – Self – efficacy of individual members, group efficacy, team performance outcomes, group's collective belief of goal achievement targets & capabilities

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With this kind of task under present the group efficacy again team's performance outcome what the team has already performed or what the TMT Dim has already achieved in terms of the outcomes in terms of outcomes then again group's collective believe the group in that in total if you are althea group members the belief about the group's achievement goal achievement targets.


Like all the members taken together collectively they believe that yes we can achieve this goal or that goal so what is the group's belief about the goal achievement targets whether they can achieve really to achieve it or whether it is to truth or whether it is it would be too difficult to get it outdo achieve it within the stipulated time or maybe other kinds of factors can interfere other kinds of problems they can face.

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Collaborative Learning (Team Learning) – contd...

- c. Outcome interdependence – the extent to which team members' personal benefits & costs depend on successful goal attainment by other members (more open-mindedness)
- d. **Group Potency** – Self – efficacy of individual members, group efficacy, team performance outcomes, group's collective belief of goal achievement targets & capabilities

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So what is the group's collective beliefs about value no feasibility of achieving that goal so the goal achievement targets and the capabilities and whether the each and every group member or the group members taken together are capable enough to achieve that goal so these are these are the four aspects or characteristics off you can say group groups belief or the group dynamics that is a psychological self equation interdependence and group potency.

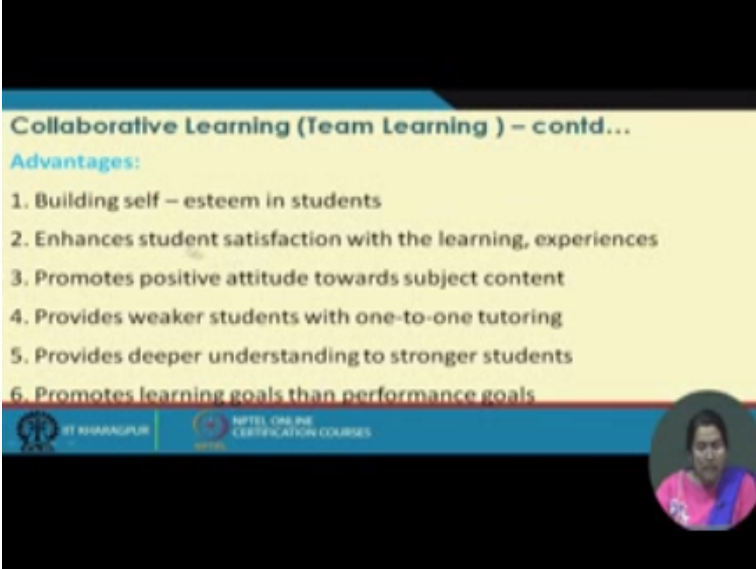
So there are many advantages of the group learning team learning of the collaborative learning like for example advantages like it builds self-esteem in among the students if you if you expose the students to the collaborative learning situation definitely individual members they build up their self-esteem self-efficacy and it enhances student satisfaction with the learning experiences because as because each and every individual learner the student is actively engaged in all kinds of activities in the collaborative learning situation because they have been assigned to assign to different tasks or different responsibilities or individually they are performing they are doing their in this so it gives them a kind of satisfaction it promotes a positive attitude towards the subject content.

So it gives the kind of positive attitude like yes it is a useful or and I am gaining or something out of it or it is really applicable in real life situation this kind of positive attitude develops in the collaborative learning then it provides a weaker students with one-to-one tutoring so in case I suppose in a collaborative learning situation out of the sixteen members maybe five are very

good where it's flex land one is a little bit weaker so but with others health like work when other team members or the peer the tutor them the coach them.

They counsel them develop their some kind of you know self-confidence among the other this week on member so automatically the week of student also the weaker learn analysis we also develop or develop some skills and competencies and also develop interests also in learning and knowing certain things through one two one two three these team members then it also provides deeper understanding the stronger students within the group are the bright students who are the good learners.

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Collaborative Learning (Team Learning) – contd...

Advantages:

1. Building self – esteem in students
2. Enhances student satisfaction with the learning, experiences
3. Promotes positive attitude towards subject content
4. Provides weaker students with one-to-one tutoring
5. Provides deeper understanding to stronger students
6. Promotes learning goals than performance goals

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Or were the good students when they are tutoring the others they're teaching others they are explaining the whole things to the weaker students so it also swindles their own understanding conceptual understanding of the thing and is also power promotes the learning goals than the performance code here it promotes the learning goals so when the collaborate with each other than that they not only gain knowledge out of it akin of learning becomes very important to them so they get motivated they get encouraged until.

The gate and crystal how to learn to learn how to learn that is more important than performing certain goals of course they perform certain tasks to complete certain tasks and achieve certain goals but learning how to learn that motivation and not in the group situation similarly at the collaborative learning primarily focuses on the students earnest and centered learning

environment if you want to incorporate this collaborative learning in our regular teaching practices etc.

Then we create the learning environment which is primarily student-centered learning center and effective teamwork and higher estimate also definitely all the members when they're actively engaged in the teamwork so it is the team also performs effectively works effectively and it ensures higher assignment for each and every team member then again positive interdependence Komsomolsk comes in and intern interpersonal relationship.

So when the team members they discuss did I have the dialogue they communicate they negotiate then they formulate the strategy how to conduct the top and then again they reflect upon it you evaluated the manna-fest rate etcetera so not only the cognitive scales not only the knowledge oriented things are developed but also social skills like interpersonal skill and negotiation scale collaborative scale then you know interpersonal skills develops are among the both members.

So again ultimately leadership as a little individual accountability also develops so all the team members they develop the kind of sense of responsibilities or individual accountability to to take the ownership of their own learning to the responsibility of completing the task this kind of sense this kind of sense this kind of responsibility ownership comes in and leadership ability also develops among the group members when they try to help others collaborate with others try to understand their perspective enter to explain that why certain strategies are will not work while other strategies will work.

So this kind of qualities like leadership scale individual owners say protecting of individual ownership accountability and all this one kind of attitude positive attitude also develops so participants become communicative cooperative caring reflective critical and creative so all these positive out complex communicative occurs not they not only explain they ensure that there are other people other members they understand it thoroughly then they must know the reasons.

Why it has a no it has happened in that way to cooperate with others they become very caring and actively listen to others views endpoints to be some reflective on evaluating the practices they become create critical as well as creative in completing the task and find out why and in

finding out which strategy has-been proven to be effective as that all kinds of positive outcomes are here and interact interaction.

So face to face classroom or Internet chat communication style it also scandals the group activity either to face-to-face classroom or internet chart it also enhances their communication style communication style it alpha becomes very effective in collaborative context and the greater opportunity for the equal participation so here every member becomes very active in equally participating in the collaborative project assignments and they take interest rather with a very keen on communicator on collaborative role achievements so here we complete this collaborative learning thank you very much the next class will continue doubt the respect.