

Education for Sustainable Development
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Lecture - 43
Sustainable Education (Contd.)

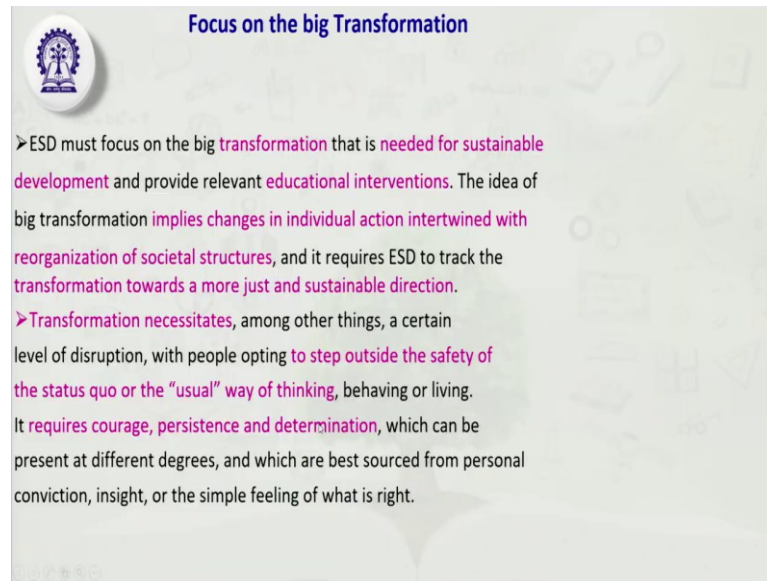
Welcome back viewers. In the last class, we were discussing about the experiential learning cycle, learning cycle like which can bring the transformation in our in self and as well as which can also bring the societal transformation by adopting a whole institution approach.

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So, to continue with that, now how the education for sustainable development primarily aims to raise the knowledge, awareness, actions and the complete transformation, social transformation that would happen as a result of achieving all the seventeen sustainable development goals.

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Focus on the big Transformation

➤ ESD must focus on the big transformation that is needed for sustainable development and provide relevant educational interventions. The idea of big transformation implies changes in individual action intertwined with reorganization of societal structures, and it requires ESD to track the transformation towards a more just and sustainable direction.

➤ Transformation necessitates, among other things, a certain level of disruption, with people opting to step outside the safety of the status quo or the “usual” way of thinking, behaving or living. It requires courage, persistence and determination, which can be present at different degrees, and which are best sourced from personal conviction, insight, or the simple feeling of what is right.

So, now to continue with that part that, so, UNESCO SDG is also focus on the big transformation in the society. So, ESD therefore, focuses on the big transformation that is needed for sustainable development and for and it is also relevant for all kinds of educational intervention so, because it implies the changes in individual action, it should be intervened with the you know reorganization of the social structure regarding the you know transformation towards the more just and sustainable action.

Most more and just sustainable society, conserving the resources and getting rid of or unlearning the unsustainable practices, unlearning the unsustainable practices being more careful and aware of you know our the impact of our behaviours on the environment on others and the ecosystem.

So, that kind of consciousness and consciences, thinking about you know our behavior you know and our behavior social behavior and its impact on others as well as on the society or an environments. So, that kind of thing, how to bring that big transformation or the change in the society. So, ESD must its focus on its basic focus is not only to achieve the seventeen SDGs, but also as a result of this, big transformation will take place in the environment.

So, therefore, the transformation it necessitates you know you can say different steps to engage the; to engage the people to engage the people in critical evaluation of you know of the status quo practices, of the existing practices and to you know among others to;

that means, to be aware of certain level of disruptions that is happening. So, to challenge the status quo that is the normal or usual way of thinking the traditional method of doing certain things and behaving and living.

So, to ask many questions to this status quo habits and consumption habits etcetera or the behaviours or the living standards; so, that is to it requires transformation requires that asking these questions, critical thinking questions of how was and why is and when and how all kinds of things to challenge the status quo behavioural pattern or the status quo you know traditional practices etcetera.

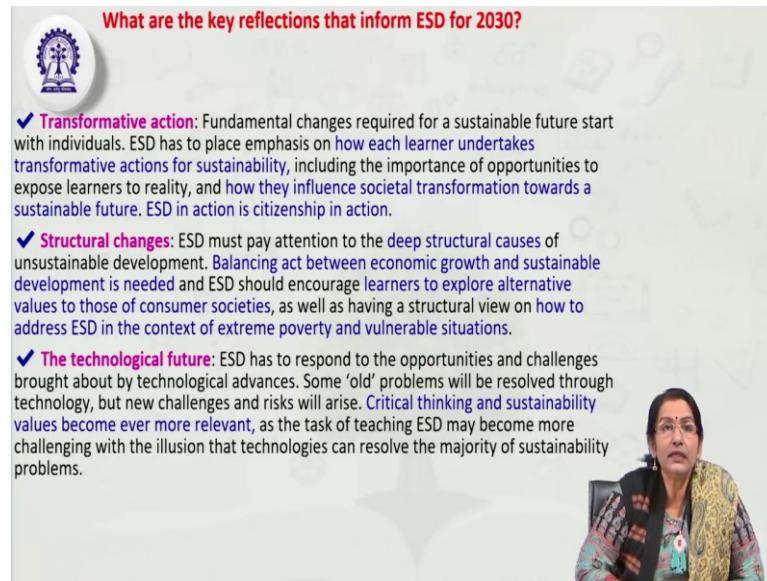
So, which can be present at different degrees which can are the best source from the personal conviction, insight and simple feeling of what is right. So, this is the this whatever the traditional or the regular or the existing practices that we are adopting, we are habituated with actually these are the result of you know these are the result of our individual insights, individual you know experiences, individual thoughts and feeling like for example, what we think that it is right so, that is why we are adopting that kind of behavior.

So, there is no strong logic behind it, there is no ethical consideration or reasoning behind it. So, as because we are used to, we love to do so and we are habituated and our community is habituated with that practice so, we are practicing it.

But when we analyze it, when we critically evaluate it and analyze it all these practices whether these are sustainable or not, whether these are you know bringing the right positive impact of the environment or not, what it is going to yield in future, when we start asking the questions, then we can find out, we can analyze it is you know its negative points, weaknesses. So, that has to be rectified, that has to be brought to the modified and revision format and then only the big transformation can take place.

So, first here is the focus of thing is the first thing is that; that means, it implies a kind of you know challenging our individual actions and the social action and collective action, but at the same time, we need to ask many questions to challenge our status quo, behaviour, our way of thinking and our existence etcetera.

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What are the key reflections that inform ESD for 2030?

- ✓ **Transformative action:** Fundamental changes required for a sustainable future start with individuals. ESD has to place emphasis on **how each learner undertakes** transformative actions for sustainability, including the importance of opportunities to expose learners to reality, and **how they influence societal transformation towards a sustainable future. ESD in action is citizenship in action.**
- ✓ **Structural changes:** ESD must pay attention to the **deep structural causes** of unsustainable development. **Balancing act between economic growth and sustainable development is needed** and ESD should encourage learners to explore alternative values to those of consumer societies, as well as having a structural view on how to address ESD in the context of extreme poverty and vulnerable situations.
- ✓ **The technological future:** ESD has to respond to the opportunities and challenges brought about by technological advances. Some 'old' problems will be resolved through technology, but new challenges and risks will arise. **Critical thinking and sustainability values become ever more relevant**, as the task of teaching ESD may become more challenging with the illusion that technologies can resolve the majority of sustainability problems.

So, now, here that the what are the key reflections that inform ESD for 2030? So, ESD for 2030 it has advocated for three kinds of steps to key reflections. First is the transformative action that has to be you know take place and structural change and the technological future. This transformative action as you can say it is a fundamental change, to bring a fundamental change on how the learners undertake the transformative actions and sustainability.

So, when we are trying to we are trying to include embed ESD based curriculum and ESD to be embedded in the whole institution approach in the in into the all aspects of the environment learning, teaching, training, ecosystem, economic growth everything. So, when ESD is going to be implemented in the within the whole institution, the how each learner undertakes its, how each learner perceives it is undertake the transformative actions for sustainability as the responsibility or how they are going to influence the societal transformation towards the sustainable future.

So, here ESD in action is the citizenship in action. So, when we are talking about the global citizenship education again, so, ESD global being the global citizen, we have to act upon the ESD based prescriptions, ESD based suggestion, ESD based practices and the habits. So, here so, when this transformative action that means, has been introduced through ESD as a component of mandatory component of sustainability, how and how the learners are taking the initiative, how the learners are taking the responsibility.

So, that is very important, the transformative action. Like the learners which how each learner has undertaken the transformative actions towards the sustainability so and how they influence and how they are going to influence the social transformation in a long way. So, here education in action is actually the citizenship in action.

That means, when you talk about global citizenship and ESD so, ESD to be incorporated in global citizenship education that means, the ESD in action when we are actually working on it, implementing it and you know you can embracing it consciously, trying to adopt it and behave in that way, so, that is actually that motivates the social transformation, that regulates and moves ahead the takes us towards the social transformation.

Then the structural change. So, similarly here, ESD must also pay attention to the deep structural changes, structural factors. In some of the cultures, in some of the rural areas, there are different basic flaws or the causes, root causes of structural biases maybe that some factors are there inherent in their culture in their ways.

So, that has to be identified ok, that has to be identifying identified that has to be identified and some kind of balancing act, we have to balance out these kind of structural causes of sustainability like maybe that these are the causes of you know all kinds of you know prejudices, all kinds of the you know false beliefs and the prejudices and you can say all kinds of you biases are social biases are there which are actually the causes of unsustainable habitat, unsustainable conjunctions and the development.

So, that is why we have to identify these root causes, the structural base of this unsustainability and then, to strategically plan it out to balance with the economic growth and sustainable practices and you know skills and competency development etcetera so, how to map it, how to identify the root cause structural cause behind unsustainable development and then to balance it with in action with economic growth and sustainable development or eco-friendly consumer societies, eco-friendly you know environment, eco-friendly practices, sustainable practices etcetera.

So, here we can say how to address ESD in the context of extreme poverty and vulnerable situation because the people who are living in the extreme poverty condition or in a very vulnerable situation or may they are in a socially isolated, they are living in the social isolation or so, then in the deep forest etcetera without being exposed to the

current practices, knowledge, information and technology of the present day so, to identify.

So, we have to bring them to the you know mainstream, to the main platform to educate them, to inform them. So, here ESD can play a very important role. So, addressing the ESD is the context of extreme poverty. People who are you know who are living in the poverty they are maybe n number of reasons why they are living in poverty because maybe that why yes, climatic change, climate, food production, creation that is these are one aspects.

But some of the human causes are also there, some of the behavioral factors are also there, some of the cultural practices are also there that has caused them the poverty. So, we have to identify it and mitigate these kind of problems through ESD, implementation ESD.

So, we have to address these, the issues in case of the people who are living in the extreme poverty and in the vulnerable situation. So, a structural change require, so, we need to identify and bring that structural change and drastic modification should be done in the structural changes of social structure that is then.

Another is that technological future, is of course, technology has helped us to you know to helps us and gives us the opportunity to radically change our situation or update our situation.

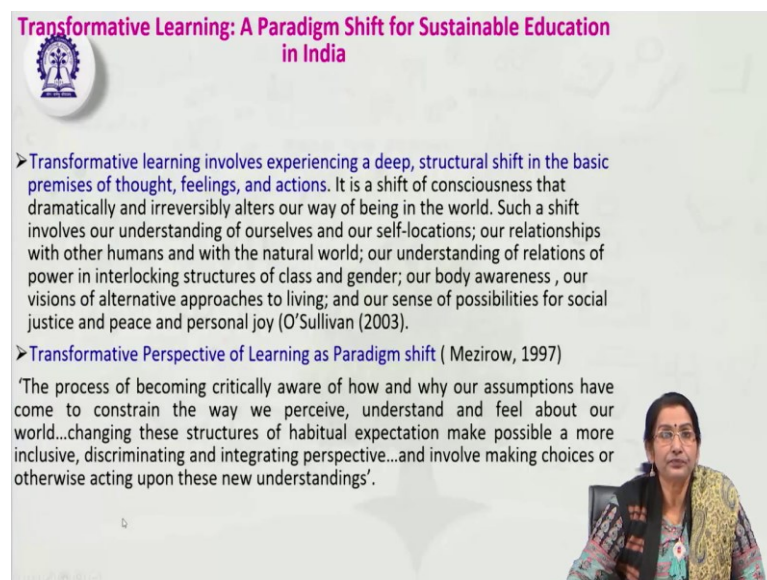
So, you can say ESD has to respond to the opportunities and challenges that can be brought to the technological advancement, how to procure technology, how to learn technology, how to use sustainably the technology so that we can mitigate the; we can mitigate the new challenges and the risk etcetera that our that are being that are regularly being raised by the environmental disaster factors.

So, critical thinking and sustainability values become more and more relevant. So, for the even for the technological exploration, technological use and advances, for betterment, for better living standard that also how strategically these technologies can be used with critical thinking, with the consensus, with the you know sustainability values, value adding without exploiting, exploiting or over using it.


So, how to judiciously use this technological advancement for the social benefit, for the you know for the social upliftment? So, and challenge and ESD; therefore ESD has become more challenging with illusion that technologies can resolve the majority of the sustainability problems. Yes, technology can resolve major problems of unsustainability, but however, we have to use this strategically, judiciously and have the control over the technology. So, technology should not overpower us.

So, technological future, technology is fast progressing, fast moving that is true, but how strategically we can learn about the technology, we can create technology and strategically use technology so that we can make our future much better than with critical thinking and sustainability values also, human values and universal sustainability values.

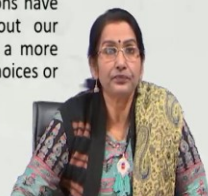
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Transformative Learning: A Paradigm Shift for Sustainable Education in India



- Transformative learning involves experiencing a deep, structural shift in the basic premises of thought, feelings, and actions. It is a shift of consciousness that dramatically and irreversibly alters our way of being in the world. Such a shift involves our understanding of ourselves and our self-locations; our relationships with other humans and with the natural world; our understanding of relations of power in interlocking structures of class and gender; our body awareness, our visions of alternative approaches to living; and our sense of possibilities for social justice and peace and personal joy (O'Sullivan (2003).
- Transformative Perspective of Learning as Paradigm shift (Mezirow, 1997)
'The process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand and feel about our world...changing these structures of habitual expectation make possible a more inclusive, discriminating and integrating perspective...and involve making choices or otherwise acting upon these new understandings'.



So, therefore, the transforming the learning so, transformative learning primarily involves experiencing the deep structure, deep learning, structural shift in our practice, in our thought, in our paradigm and the structural shift in the basic premises of the thought like it is it acts as a paradigm shift on a thought process, again feelings and actions. So, thoughts, feelings and actions, these are very much interrelated.

So, transformative learning brings that change, brings that modification, brings that upgradation not only in the experiences, but also in our structures in the social structure, cognitive structure with the cognitive structures premises like thought, feelings, actions and emotions etcetera everywhere.

So, therefore, it has to be brought to our consciousness, it has to be sustainability should be there a component in our consciousness ok. So, that you know that sustainably, that dramatically, that irreversibly alters our way of being, our way of existence, our way of behaving in a sustainable way ok.

So, therefore, so, we have to be very much thoughtful, very much judicious, very much rational, very much you know very much you know empathetic and compassionate not only with the natural world our environment, but with regard to our self you know self-care, self health also, but also relationship that we have developed in the community, relationship, class then we have to be very you know we have to very you know sensible, sensitive towards the cultural aspect perspectives of class, gender, all kinds of thing then the we must have the vision of alternative approaches to living.

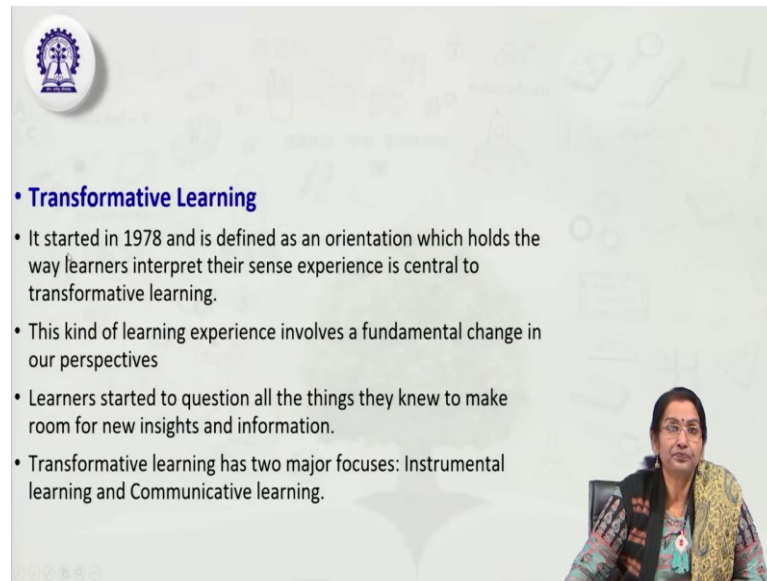
So, we can think of an alternative approach to our life and our sense of responsibility, sense of possibility and for social justice, sense of responsibility for social justice and peace along with the personal joy. So, that is the definition given by O'Sullivan 2003, the transformative learning how it involves experiencing a deep structural shift in the basic premise of thought, feeling and action. So, it is a kind of paradigm shift bringing us that means a shift towards the more conscientiousness ok.

So, now, the according to Mezirow; according to Mezirow in 1997, he has also defined transformative learning in a very detailed way. So, transformative perspectives of learning is a paradigm shift, is a shift in our thought process in our outlook in our view.

So, Mezirow explain it that this transformative learning is a process of becoming critically aware of how it happens, why it happens, challenging our you know current practices like the challenging the status quo, then why our assumptions have come to constrain the way we perceive it, understand and feel it about our world, the challenging the pre-existing structure of the our society, then changing these structures to the habitual expectations that makes possible for a more inclusive and integrated perspective and also involve making the choices for otherwise acting upon these new understanding.

So, by understanding the gaps, dilemmas and confusion etcetera, understanding these things then to start our action, to start our decision, action and thought on these critical issues of understanding the new dimensions ok.

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Transformative Learning

- It started in 1978 and is defined as an orientation which holds the way learners interpret their sense experience is central to transformative learning.
- This kind of learning experience involves a fundamental change in our perspectives
- Learners started to question all the things they knew to make room for new insights and information.
- Transformative learning has two major focuses: Instrumental learning and Communicative learning.

So, this is the now, let us discuss about the Mezirow's model of transformative learning; so, Mezirow's model of transformative learning let us see. So, according to that, transformative learning actually it started in 1978, it is defined as an orientation as an orientation that holds all the learners to interpret their sensory experiences So, which is central to the transformative learning.

So, as Kolb's experiential learning that we have already discussed that means, concrete experience that means, we experience the world through our sense organs that is a concrete experience, then we reflect and observe on it, whatever we have received we experience, then we reflect and observe on it, then we conceptualize and frame certain hypothesis, assumptions and then, after that we try to experiment on these assumptions the active learning.

So, similarly so, that means, in 78 when it is started, the orientation is towards that means, understanding and interpreting our sensory experiences which is a very central part of this transformative learning, unless and until we try to understand our own experiences, how can we bring change in transformation.

So, therefore, the kind of learning experience it involves the fundamental change in our perspectives. If you want to bring 300 degrees 60-degree transformation in the society that means, it should also bring our whole perspective, our total perspective changes that

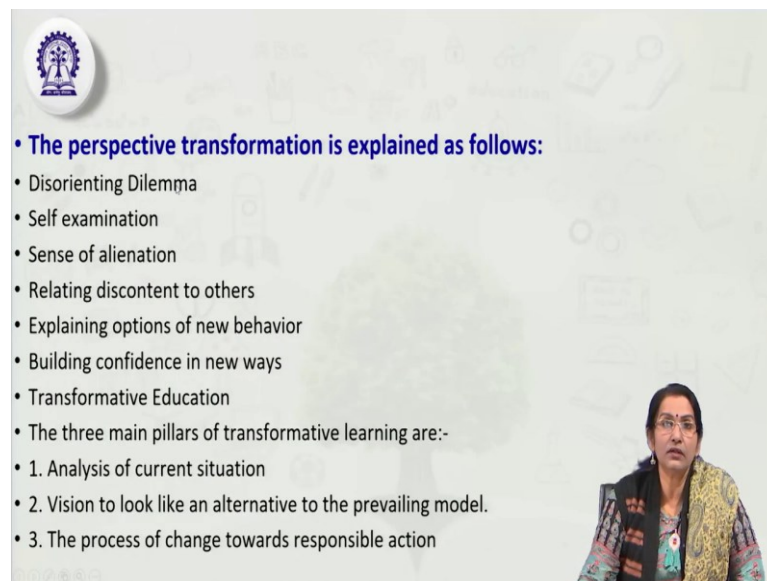
is our consciousness should be shifted from one aspect to one domain what platform to another platform.

So, therefore, so, you can say learners they start questioning all the things that they encounter that they face, that they face in on their day-to-day life so, knowing to make the room for the new insights and information.

So, here we have to the learners, the stakeholders, they have to very open minded not only critically evaluating and asking the questions and challenging the existence existential or current practices, but also unlearn certain things, but also keep their mind space open for welcoming the new ideas or the new insights and the new informations ok.

So, therefore, transformative learning has two major focuses, one is the instrumental learning, and another is the instrument communicative learning. Now, let us explore what are these factors.

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• The perspective transformation is explained as follows:

- Disorienting Dilemma
- Self examination
- Sense of alienation
- Relating discontent to others
- Explaining options of new behavior
- Building confidence in new ways
- Transformative Education
- The three main pillars of transformative learning are:-
 1. Analysis of current situation
 2. Vision to look like an alternative to the prevailing model.
 3. The process of change towards responsible action

So, the perspectives of transformation that is can be explained as follows like you know first thing is the disorienting dilemma. Like the moment we face confusion, conflict, dissonance you know dilemma like for example, we are not happy with the status quo, we are not happy with the existential practices, we are not happy with the current

situation, we are not happy with the economic growth, so, it creates a kind of dilemma confusion at the chaos in our mind so, that is called the disorienting dilemma.

So, how this how the dilemma is and how to understand it and it has started and how to understand it, so, there we then we have to apply our self-examination, our intuitive learning insightful, analysis etcetera that is from disoriented dilemma to then we can progress by making self-examination. So, we have to begin with our individual self.

Like self-examination, sense of alienation like keeping yourself alienated or away from the situation, then we have to analyze the whole situation as an external observer not as a stakeholder major stakeholder, but as an external member like alienation, self-alienation that means, we have to alienate ourselves from that situation even though we are the member of that environment, we have to alienate ourselves from that situation and objectively, logically, rationally think about that situation. So, that conflict that dilemma.

So, that is sense of alienation and self-examination. Yes of course, we are going to examine ourselves. Relating discontent to others; so, sometimes when we have alienated ourselves so, sometimes also relate we relate some kind of dissatisfaction, discontent that is to others. So, these are the variables because of which we are not actually achieving our 100 percent targets, goals etcetera.

So, relating to discontent, relating discontent, dissatisfaction to others other factors, other variables. Then, explaining options of the new behavior then yes, if this is the scenario, then what could be the possible solutions, what could be the new ways and means of you know adopting the sustainable behavior then, we have to think of it.

So, explaining the options of new behavior so, in order to achieve its alternatives solutions, then we have to you know explain the different options or the probable suggestions example probable hypothesis and hypothetical solutions of the new behavior that is the we have to explain options of new, what are the available to us for the new behavior.

Then, comes the building confidence in new ways. So, if we are adopting the new kind of behavior, then yes of course, we have to develop the build the confidence which can be put forth put through in the new ways of learning etcetera. Then, comes your transformative education. So, before transformative education, all these steps or you can

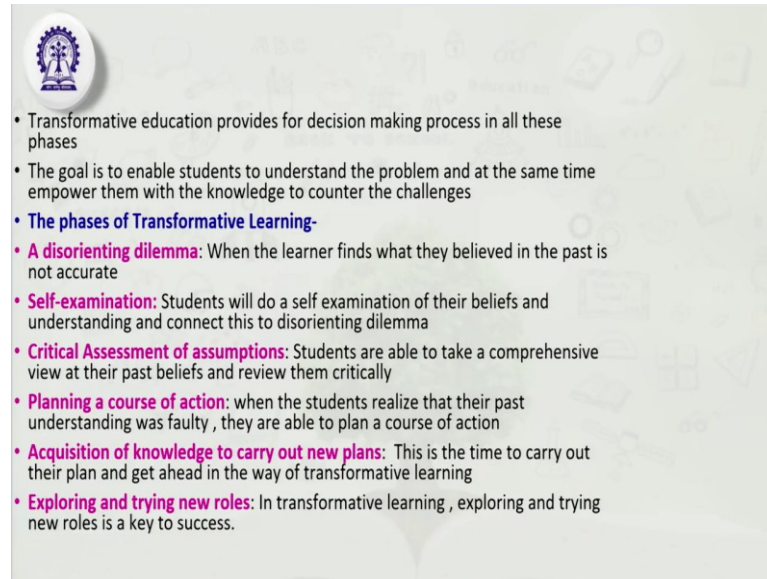
say these are the prerequisites, pre-training kind pre-transformative learning experiences that is a pre-training the transformative action.

So, the three main pillars of transformative learning are you can say analysis of the current situation it is ok, then vision to look like an alternative to the prevailing model. So, thereafter after analyzing critically evaluating the present situation, then we have to formulate another alternative model yes, what could be the possible solutions. So, vision to look like an alternative to path to prevailing model ok. So, therefore, we have to formulate a different kind of different alternative model which will be more sustainable and effective.

So, here the process of change towards that responsible action. So, you know after a concrete experience, then reflective observation, then theory conceptualization, conceptualization of ideas and problem, then thereafter from there again learning by doing then trying to change the situation by learning when doing and from learning by doing, then getting the feedback, again it is going to be transform to the transform to the our experiences and behavior.

So, in this way so, analysis of the current situation, vision to look like an alternative possible alternative resource for the existing model and also process of change towards the sustainable action. So, this is the learning cycle, we can say, this transformative learning itself is a learning cycle. So, which helps us in mobilizing our efforts and energies, etcetera and motivations towards the positive direction.

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- Transformative education provides for decision making process in all these phases
- The goal is to enable students to understand the problem and at the same time empower them with the knowledge to counter the challenges
- **The phases of Transformative Learning-**
- **A disorienting dilemma:** When the learner finds what they believed in the past is not accurate
- **Self-examination:** Students will do a self examination of their beliefs and understanding and connect this to disorienting dilemma
- **Critical Assessment of assumptions:** Students are able to take a comprehensive view at their past beliefs and review them critically
- **Planning a course of action:** when the students realize that their past understanding was faulty , they are able to plan a course of action
- **Acquisition of knowledge to carry out new plans:** This is the time to carry out their plan and get ahead in the way of transformative learning
- **Exploring and trying new roles:** In transformative learning , exploring and trying new roles is a key to success.

So, now so, the transformative education provides a decision-making process in all these phases. So, all throughout this phases, throughout these stages, all these stages these are the stages we can see. Throughout all these stages, it suggest it gives a kind of you know provides a decision-making process, it relates to the human thought process, active thinking, reflective thinking and the decision-making process.

So, the goal is to enable the students to understand the problem and at the same time, empower them with knowledge and counter the challenges. So, the main the transform the motto or the goal or the objective of the transformative learning is that to mobilize the students towards not only identifying the problem but understanding the nuances of the problem, complexities of the problem and then, empower them with right kind of knowledge and skills to face these challenges.

So, these are the; these are the phases that of transformative learning we have just discussed. Disorienting dilemma like, when the learner finds that what they believed in the past is actually not accurate, it is not happening right now. In the past, what we were doing it is not exactly the scenario right now, so, there is a confusion, there is a dilemma.

Self-examination; students will allow will do a self-examination of their own beliefs and understanding and connect this to this de-orienting dilemma. Yes, those who are; those who are very flexible, who are dynamic, who are you know who are very sustainable you know sustainable loving.

That means, so, sustainability that means, more dedicated towards sustainable development goal so, they can quickly find out, can quickly evaluate their the flaws in the in their past thoughts, ideas, beliefs and experiences and can quickly change the strategy to adopt themselves better in the for the present demand requirements. So, that is called they are very open-minded things.

So, here for every kind self-examination is that once the students they alienate themselves from the situation and then, evaluate, try to evaluate what he were what he was doing, what they were doing in the past and what they are supposed to do right now. So, this kind self-examination.

Then, critical assessment assumption is that, that the students are able to take the comprehensive view; a comprehensive view of their comprehensive view of their past beliefs and review them critically. So, here all kinds of self that critical thinking and the reflective action starts, begins with.

Critical assessment of the assumption, what were their assumptions and now, they are critically and comprehensively evaluate their own assumptions and the thoughts. So, that is the critical as critical assessment and assumptions of students thoughts, own thoughts and the past beliefs ok.

Then, after that after finding out the gaps and the lapses and the weaknesses, now, they have to plan a course of action then, next step is the plan a course of action.

So, when the students they realize that when the students they realize that the past understanding was faulty, there were flaws in the actions, there were flaws in our approach, there were the situation the context was something different now, keeping in mind the present scenario and the context, we need to change our action plan, need to change our course of action so, they accordingly, prepare a course of action which is which would be very much relevant to the present situation.

Then, acquisition of knowledge to carry out the new plans. So, the when what they have planned then course of action it may require new sources of knowledge, new skills, new competencies, new technology etcetera now, they have to better prepare for that. So, for implementing that current action plan, course of actions, they need to understand the concept, they need to acquire the new knowledge, skills competencies.

They need to apply the technological advancements, technological skills also so, with all kinds of the preparation now then only they would be able to carry out that action plan to go ahead, to move ahead in the process of transformative learning.

So, then exploring and trying out the new roles, the in transformative learning of course, from time to time, the learners, the stakeholders, the activist, the actors they from time to time they explore, they go on they keep on trying out the new roles, they keep on experimenting the new components, they also explore the new ways of success. So, this is an ongoing again continuous learning process. So, these are the different stages and the phases of transformative learning.

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So, this has been given I think in a diagrammatic way that is Mezirow's 10 phases, whatever we have discussed, this has been given like disorienting dilemma to self-examination, then critical assessment; critical assessment of the past practices, theoretical practices and present situations, then recognizing the flaws and gaps and etcetera, then exploration; exploration of the possible solutions, new solutions, new solution, then on the basis of that, possible solutions and exploration of the new insightful solutions.

Then, course of action will be planned, the planning of the course of action and again for implementing those course of actions, then again acquisition of knowledge, skills, competencies and technical things etcetera so, that means, competency development,

acquisition of knowledge for executing or implementing this course of action and planning.

Then they are again provisional trying of the role. So, initially they may start with a kind of pilot study, project etcetera that temporarily now they are trying out, provisionally trying out the different roles, plays the different roles of you know of a; you know of an engineer, of a doctor or a social reform or office scientist etcetera provisional trying out the roles initial that means, initial experimentation.

Then, thereafter gradually building of confidence, competence and self-confidence with more practice, more you know pilot study, more trying out so, gradually they build the competence self-confidence etcetera. So, then the that means that is so far whenever we are trying to experiment, trying to introduce something new, something drastic change, something in even in the working you know organizational work process also.

So, initial try out, initial pilot stage initial pilot experimentation takes on from there only when they start, they begin with then gradually they pick up the confidence and the confidence and competence yes. And find out also evaluate the its effectiveness by identifying the gap area. So, there that thereafter they modify it, revise it to successfully launch it.

So, similarly so, building the new competence and confidence they try out to develop the confidence and the new you know new approaches, new strategies and after fully completing it with confidence and competence, then they try to integrate it as a part of their part of their process, part of their product, part of their manufacturing process, then part of their behavior, lifestyle etcetera so, it kind reintegration.

So, after this, after trying out, then building confidence and competence, evaluation, then reintegration takes place. So, in this way, complete transformation takes place. So, these are the 10 steps as per the Mezirow's theory starting from disorienting dilemma that is understanding the that means, understanding the present situation in comparison to our past belief, old beliefs and prejudices or maybe old practices.

From there onwards what are the learning cycles steps of learning cycles towards bringing the 300 degrees transformation towards the social to bring the social

transformation. So, these are the 10 steps of Mezirow's this you know transformative learning theory.

So, for the time being, I am just concluding it right now. In the next class, we continue with the other topics.

Thank you very much.