

Lecture - 10 : ESD and Sustainable Learning

Hello viewers, welcome back to this NPTEL course on sustainable happiness. In the last class we are discussing about sustainable learning and to continue with that now we can see there. So, how education for sustainable development ESD plays a very vital role in enabling the school education, higher education to impart this sustainable pedagogy, sustainable classrooms, sustainable learning content. content for future you know for futuristic learning and for global citizenship and all kinds of sustainable development goals. So, now, let us see that how to equip the young people with all the relevant skills, capabilities and so that they can excel at the living their own lives as well as contributing towards the community life. and enhance the humanity and in this way they can also strengthen the planet earth in terms of global citizenship, global partnership etcetera.

So, education for sustainable development as all of you know that ESD that is the SDG 4.7 has already been declared by UNESCO as the key tool for achieving for an. enabling the countries and the states to achieve the all the sustainable development goals. So, ESD incorporates the key environmental challenges such as the climate change and other you know pollution other kinds of things which are which are already embedded or are supposed to be embedded as in the core subjects.

core subjects like math, science, environmental science etcetera. And that involves modifying the teaching learning process to a more all encompassing approach. So, ESD has already advocated has already declared that these core challenges like the climate change, you know pollution, carbon footprint. and environmental you know biodiversity all these contents have already been included in the core subjects. However, the students ah however, we have to enhance a sustainable pedagogy how it should be taught by clearly creating the ecosystem.

So, the students would be able to relate what they are learning in the classroom, they should relate it to their own real life situations, their actions. So, that they can reflect on their own actions and behavior and reflect on that. So, that it gives a kind of an alert and awareness to change to modify their behavior. So, and in this way they can lead the changing behaviors and adopting a sustainable lifestyle, sustainable consumption. and to and this kind of you know this kind of awareness can be spread over the generations over the generation about the in a respective of type of the school education system or institutions.

Now, let us talk about the sustainable pedagogy what does it mean sustainable learning sustainable classrooms etcetera we have already discussed. Now, sustainable pedagogy that

is across the which is relevant for across the campus across the institutions. So, nowadays we are also research also and we are or educational institutions also they are advocating for you know interdisciplinary work, multidisciplinary work, research work as well as the transdisciplinary work. And these sort of works actually requires a crossover of all our disciplines and coming to the interdisciplinary research point of working on certain authentic, reliable and valid method methodology or action research or you know applied research to address the social problem, societal problem, environmental problem, economic problem across the globe. So, that is the sustainable pedagogy is valid for across the campus, across the type of institutions, across the type of organizations.

Now, sustainable pedagogy is you know this is the conceptual model of you know sustainable learning and digital collaboration. Sustainable pedagogy has certain features, certain basic principles and principle these are like sustainable pedagogy is collaborative. Definitely in interdisciplinary, multidisciplinary research we have to collaborate with other researchers, other faculty members. It is creative because always we try to innovate something new. which would be even very much useful for sustainable future.

And it is also it also advocates for ethicalness definitely whatever where we whatever method or innovative practice or innovative technology will develop that has to follow certain guidelines some principles that ethical standards like cyber security and you know code of conduct and you know practices code of practices all these. So, sustainable pedagogy always follows the ethical guidelines. And it is it gives us beyond the book that means, it gives us the practical knowledge which goes beyond the book. Why because it is primarily based on experience and learning primarily based on you know learning you know learning by doing learning by innovation learning by creation. you know learning by problem solving.

So, hence the content the approach the pedagogical approach is beyond the book and it is repurposing that means, whatever sometimes we are also engaged in the research who has like redesigning something or sometimes we have to unlearn some things and relearn redesign something. Hence it has because we want to enhance increases It is multiple we have want to add the multiple purpose multipurpose you have to make you want to make it as multipurpose or we have to address the multiple issues challenges etcetera through some strategy. So, that is why it is repurposing we can change we have to modify we have to revise and update the pedagogical. strategies as per our purpose. So, it is re-purposing multi-purposing.

So, here we can say re-purpose our students assignment into the big blocks post re-conference and publications like we can how we can publish we can publicize we can highlight we can disseminate our research idea and solutions and the projects etcetera

through different platforms may be through not just through publication, but through conference papers through blog post through social networking sites through digital online learning platform. So, we have to repurpose that means, what are the multiple purposes of these things and how in multiple ways we can disseminate the information across the population. So, now, we can also transpose the academic writing into the crossover writing that can also be done for the repurposing our pedagogy. and transport the module from something to we have made something that we are taking back that means, something you know we are now making. That means, from the past we can modify and update it and revise it for the present purpose.

Second is a sustainability of learning the way we are learning it has to be sustainable it has to be sustainable. It has to be lifelong, it has to be proactive and should endure over the period of time. So, such learning primarily focuses on the technical skills, knowledge, competencies. So, competencies and applications of these applications of these knowledge skills etcetera in other domain in interdisciplinary research. So, that we can optimize the learning from the experience from our experience and disseminate it across the field.

So, as you can see in the figure sustainability is the core thing and learning you have to begin with the learning and through sustainable learning and sustainable learning about sustainability, sustainable pedagogy etcetera. Then we will move towards the innovation creation etcetera which can bring the solutions for the social challenges and social benefits. So, this is I can say this is a schematic framework where you can see how sustainable learning and it is a sustainable learning and sustainable learning environment how these are overlapping. For example, a sustainable learning suppose it focuses we are focusing on the content or the challenges like clean water, climate change, renewable energy these are the content. Now, content now the in sustainable learning environment what are the methodologies? We are engaged in experiential learning and we are engaged in experience active learning, independent learning, collaborative learning, re-learning, future we must have some future orientation of learning.

So, these are the sustainable learning environment and these are the content. Now, when they overlap, so overlap this is a kind of you know they are there are two So, how to enhance, how to increase the outcome of this sustainable pedagogy here you know different models. There is these researchers Berne model, Hayes and Rangers and Pickford and Ellis they have developed that they have developed different models. different models to make the learning more sustainable, more futuristic and more futuristic and you know sustainable learning for education, how sustainable learning for education and sustainable learning how these two things can be embedded to get the you know outcome which is again very much relevant for the future learning. So, now, these are again as per these are the this is the basic you know this is the basic paradigm of basic framework of sustainability you

know having the three pillars primary three pillars that is one is the environment as a domain and the economic domain another society domain that is the basic structure of basic triple bottom line pillar or three primary domain a triple bottom line structure of the sustainability these are primarily three domains.

Now, as you know all the three domains are interdependent or in or overlapping with each other interdependent interactive in each other like such environment economic interactions are can happen and similar. So, and similarly environment social and social all these are interdependent interlinked. So, as a result of that there are some common areas over the each mutual domains like environment and economic domain the common areas like it is the environment economic domain there may be you know there are there may be some dilemma some conflicts etcetera how to convert our goal is how to convert it into the strategies and the goals sustainable development goals. So, here we can say When environment and economic model they overlap we have to focus achieve the goals like energy efficiency then incentives for use of the natural resources all these kinds of these are the. So, these are the sustainable development goals practices and strategies.

So, in all across all the three domains the same thing happens. So, now coming to from sustainable pedagogy to now we are coming to purposeful pedagogy. Purposeful pedagogy is a learning design primarily having a clear purpose, you know evidence informed method and authentic assessment. That means, it has purposefully it has been designed to achieve certain targets. May be it can be achieved through projects, through projects, through you know field survey, through you know through some online courses, etcetera.

The practices may be diverse. But, the thing is that the focus is that the learning has been designed to primarily focus or achieve some purpose and it is backed off or supported with evidence informed methods and authentic assessments. So, practices like you know project based learning, project based learning where the students learn about the subject by working in the groups, teams in a collaborative way. And maybe that sometimes they have been assigned some problems or maybe that some open ended problems are there, they can choose and they can pick up and choose and try to solve it through hands on activities. Another is that evidence informed, evidence informed it refers to the teaching practices which is supported by robust and reliable research.

So, teaching evidence means there must be some empirical validity, empirical evidence, empirical research findings to support the pedagogy, to support the learning process. So, that is on the basis of that evidence only the teaching practices are being supported. are being practiced and because it has a robust, it has a strong empirical research base. Another is the evidence informed pedagogy. Evidence informed pedagogy is a practice which facilitates the ability to generalize the teaching practices from instructional approach to

various

environmental

context.

So, that is applying the teaching practices to the for the environmental benefits, environmental problems or problems solutions etcetera. Another is the digitally curated practice also it comes under purposeful pedagogy, which means that selecting grouping and contextualizing preserving and maintaining the archiving and sharing the digital content whatever it is there available in online or internet. we have to select it, identify, group it, then you know archive it and then you can you can say share it, share the digital content and we have to customize it as per our requirement, as per the requirement of the community, as per the requirement of of the stakeholders. So, in this way the opportunity for the community building critical enquiry and platform to demonstrate interpretive creative abilities can be possible through these things. So, that we can you know develop we can enhance the digital literacy among our stakeholders, we can also help the faculty and the students you know to you know to you can you know to moderate the contents available and customize it as per our requirements.

So, these are the practices of the you know purposeful pedagogy. So, another is the multi-modal channels of information, now it is the you know it is the in the globalization context with the internet age in the internet age. So, communicates we have there is no you know there are multiple ways and means and tools for the communication, communicating the content and our idea to everybody across the globe through different you know images, text, motion, audio different kind digital tools etcetera. Now, culturally another is that culturally responsive pedagogy, this is also very much relevant in the context of sustainable pedagogy, sustainable education. Because you know in culturally responsive pedagogy, when we are designing something and the students and definitely the pedagogy classroom teachings it the sustainable teaching learning situation, it has the student it is primarily student centered approach.

So, student plays a very key role and student. So, we have to customize our whole thing let our content our teaching practices pedagogy etcetera as per the requirement of the students and to and we have to customize it as per the students learning needs. So, the students unique as here the students unique cultural strengths are also identified nurture to promote the students achievement and a sense of well being. Suppose, for example, when we are framing such content. So, culturally it has to be culturally responsive pedagogy.

That means, if it includes the students from all across the globe having a particular kind of cultural background or diverse cultural background accordingly we have to address this cultural factors also. So, that the students will feel that means, he is very much close he is he is he is very much attached or he is he is cultural needs social needs have been addressed. So, that gives a kind of sense of complacency sense of fulfillment sense of meaningfulness.

So, in this way well being can be assured. So, culturally responsive teaching helps in bridging the gaps between diverse students or diverse classrooms.

So, by engaging the students from every community from the minorities to majority communities or communities. So, those who are from the ethnically different backgrounds. So, how to engage them in a learning process which you know process in a very meaningful way. And whatever their topic the content the problem they are working on this it must be very much relevant authentic and meaningful for everybody. So, here there should not be any bias any cultural bias stereotypes nothing, but all the that means, students from all the communities how this should be equally represented in the culturally responsive teaching practices and in the classrooms.

So, on this is again this is again a figure this is again a model given by some researchers. As you can see how to make the this is a primary content is that this is a Burns model of sustainability pedagogy of learning theories. Now, this is thing the how to make the classroom more organic nature of the classrooms and you know how to communicate how to communicate and how to build the campus. Now, we are coming to the happy classrooms, happy classrooms and green schools. Now, ultimately our focus our goal and objective is sustainable happiness.

So, sustainability one aspect is the sustainability another is how to make our students, how to make our learners, how to make our population happy. and beyond happiness that is the well being and again because well being is more sustainable it is more futuristic and more long term. So, how then how these environmental sustainability and happiness and well being can be embedded in the classroom that is a happy classrooms and green schools. So, now these two concepts, these two topics, these two concepts are very much in demand and very much in discussion nowadays. And we have already discussed about them you know happiness curriculum, happy happiness curriculum form formulated and practiced being practiced by the Delhi government schools.

And it has also expanded over the other states they have also designed the similar kind of courses. school at the school level. So, now, here attention to happiness well being and social and emotional development is very much crucial for the school success. So, how to make the schools happy? So, that is where the school that means, school campus should be you know the campus should be very you know luring campus would be it is a you know its ambience should be very good it should be it should look green it must have sufficient space and all the amenities. So, attention so, all these factors like happiness in the campus school campus in the classroom and well being of the learners and how to create a social social emotional learning environment learning and involvement where the social and emotional development of the learners can be can happen that is a very crucial factor

nowadays in the for the schools success.

So, it raises not only it raises the academic achievement of the achievement of the learners, but also it also it should also lower the behavioral it should also lower the behavioral irregularities behavioral or how to. behavior irregularities and the you know all kinds of the conflicts or the you know like the bullying all kinds of all kinds of grievances, all kinds of conflict, all kinds of clashes all these things should how to reduce it the negative impact how to reduce it. are not just to enhance academic achievement, but enhance the morality of both the teachers and the learners that is the value system, the ethical standards, how to enhance it through classroom through the school school school environment, school curriculum, school activities and through and the schools schools teaching learning practices all things. So, ultimately it is it also focuses on morality how to develop the good moral values ethical conduct good conduct and consigns of the teachers as well as the students and that is that is declaration of UNESCO MGIP that is Mahatma Gandhi Institute of Education for Peace which for peace which is established in New Delhi only. It is and it primarily advocates for socio-emotional learning and you know moralistic learning peace that means, peace education and skill development of the youths etcetera.

Now, so as per the As per this kind of the handouts like for a company system they have also they have also they have also given they have also you can say subscribed one guideline one guideline or manual also where you know how they have designed the happiness life happiness. For example, some exercises small exercises are also available. So, for example, every individual learner and the student he needs to identify what is the purpose, what is what are the things that if he that is the goals of his happiness that means, what makes him happy. So, in this way the happiness hand out you can say the happiness hand out. So, it definitely it relates to different kinds of activities like joyful activities, excitement, pride, hope etcetera.

Now, here the child has to identify what makes him happy, whether and what are the concepts of happiness and what makes him happy. So, in this way we have to that means, for example, they will be able to know about these factors, these are the compositions of happiness that means, hope is a positive. So, all the positive concepts. So, they can know that what does happiness mean to us, what does the happiness mean to each individual learner and child. So, they will identify suppose under suppose they have identified a hope.

So, now, they will explain how hope can make him happy like they are hopeful about their own future these certain things they words synonyms or the words they relate to hope they will identify and put it here. Similarly, take pride or they feel excited or the joy or you can say they are when they are keeping they are calm and quiet they are alone they feel happiness. So, what are the things what makes them happy? So, now this is the happy

school framework given by the researchers and that is researcher and UNESCO. You can say that the three primarily in the teaching learning process the school class framework, classroom framework. One is definitely people are the people is important factor, another is the process that is teaching learning process and the place that is the context environment.

So, these are some of the some of the you can say concept they have identified. So, how the people should interact, how the people should share their thoughts and ideas etcetera, how the people should develop the attitude skills and positive attitude, how they should address the diversity issues, how they should collaborate and develop the values and practices, valuable practices, collaborative learning etcetera, how the teacher working how the how the teacher works in the environment the teachers working conditions working hours and how the teachers well being can be assured and what are the how what are the new skills and competence the teachers should learn to learn should get the opportunity to learn. So, it is more people centric in the sense that not just about the learners, but teacher student interactions, friendships, interactions among all the stakeholders, both direct stakeholders and indirect stakeholders like the community people. the positive attitude the interactions then then then their emotional bonding their attachment their communication all these things comes under the people people domain another is the process how the process how the all the activities are being carried on like reasonable and fair workload should be given to the Similarly, team work collaborative spirit should be promoted, students should be engaged in a proper teach classroom environment with classroom discussion etcetera and debates and learners every learners should have the freedom to engage themselves in the creative ideas, thoughts and the sense of achievement and accomplishment. How it has to be you know how it has it can be enhanced time promoted through encouragement appreciation etcetera, co-curricular, extracurricular activities and you know celebrating the events, celebrating the functions, cultural events.

So, again learning as a team between the students and the teachers, I mean that is it is a more of mutual learning, learning together, reciprocal learning and you know how it should be made useful and relevant and authentic for engaging the learning content and again ultimately how the mental health and well being can be can be achieved and how can we reduce. So, similarly place that means, ecosystem the environment should must be secure safe and conducive and warm and friendly like environment and certain amount of that means, sufficient amount of green space should be there should not be any kind of you know bad conduct like bullying or any kind of you know abusive behavior. So, in the schools vision and leadership and these are very much important schools vision should be communicated to every teacher, every staff, every stakeholder, positive disciplinary actions, good health and sanitation facilities, facilities and democratic school management. So, everybody every and there should be deep that means, it should there should be deep rooted you know value system and authentic professionalism and the good conduct and

goals and you know democratic spirits and goals and objectives. So, all should be all everybody and everybody and each stakeholders of this campus they should be informed they should be communicated the vision mission goals of the schools and everybody should everybody should know about the goals and objectives and how and so that everybody would feel that every both the students teachers and the other participants stakeholders staff.

So, they should feel that it is it is our campus it is our institution is our school. So, they take the ownership and contribute significantly. So, that sense of ownership should be there. So, we have to design the ecosystem of the learning the schools or the campus college campus whatever that is the That is a place would be designed in such a way that the ecosystem environment of the classroom then happy school should be that it that means, every stakeholder, every participant, every agent of that institution of that school should take the ownership of you know ownership of that campus. So, that can makes that the school framework is a happy school framework.

Now, here the people are important as we have already discussed school leaders, administrative staff, teachers, students everybody should be you know there is a it covers the overarching community. So, according to this framework you know quality of these relations should be very authentic individuals themselves are very much very actually human the people social capital is very important. Hence, how to strengthen this social capital through interaction through practice through positive relations. through appreciation, through compassion, through empathy etcetera. So, the relations with the both the relational and individual aspect that means, not just the interactions and the interpersonal relationship among the stakeholders, but also the individual learners.

individual space and his own happiness and well being should also be reinforced, should also be promoted in the same. So, mutually in the process of mutually reinforcing approach towards the well being. Now, coming to the process, the process that is the teaching learning content, approaches, methods used, learning experiences, field studies, teaching methods, pedagogical approach, educational technology used. So, all these things comes under the process of educational sustainable and happy schools. So, that the teachers and students they have reasonable and fair workload.

So, the similarly the students should not be overloaded with the homework. They should not have the learning should be or the educational learning should not be a burden rather it should be a happy journey. It should be converted to a happy journey, lifelong learning, continuous learning, sustainable learning that is a happy journey. So, workload should be fair that whatever the discussions, classroom activities everything are being this should be very democratic, transparent. autonomy should and freedom should also be given every

individual learner should be allowed to speak their mind.

They must be given the opportunity and individual space and resources to think to think to reflect to be creative to be innovative. So, that every learner both the every learner Every stakeholder both the teachers, learners as well as the other staffs they should feel valued, because you know they by taking the ownership they feel that their ideas are being considered, their suggestions are being taken into account, their interpretations, their opinions are also being valued. So, they feel valued, appreciated and in this way the whole that means, the school is not just about the school campus, but the whole community. So, a trusting kind of interesting environment can be created like school and its relations with the community. So, in this way it brings a broad array of the students talents their competencies.

So, here in this way there is it is in this process also you know in the happy school environment not just a whole community can become happy, but it also nurtures the students talents their skills competencies and you know their enhances their both academic and and co-academic or non-academic abilities and ultimately their well-being can be assured. So, collaborative therefore, in this process collaborative spirit engaging the learning engaging the learners students in the learning learner creativity should be addressed in the classroom. So, now, it is know so many pedagogical approaches you know pedagogical innovative approaches like you know flip learning then you know experiential learning the problem based learning project based learning. And the peer based, peer learning, peer learning even the peer learning and the that means, all the classmates, all the peers, all the learners, co learners, they should mutually teach and tutor their peers, their colleagues, their friends in the within the classroom.

Similarly, the teachers also should also. share, mutually share among themselves their among their colleagues about the pedagogical approach method they are using in the classroom. In this way they can engage themselves in a very positive and successful discussion, classroom discussion, democratic discussion about that which type of approach is most suitable and they can also elaborate on the learners characteristics their readiness their problems they can identify their problems the difficulties and they can also address it so it it actually covers a to z a to z of the learning system that is equal learning environment and the schools now the place is about the campus campus location that the environment so it should be it should have a friendly very warm air conducive learning environment and we should look into the surround look into the surrounding physical surrounding of the campus the classroom the You know facilities available, the layout of the school, the ambience of the school with more space, more greenery and more varieties of you know resources, varieties of intellectual and intellectual practical resources should be given, should be added. So, that it can create a creative learning platform, so that it all the learners

can they can initiate their own interest they can initiate they can take interest they can initiate with their own interest hobbies likings and they can they can get the opportunity to explore their individuality the individual potentialities. So, the atmosphere because the school campus school environment atmosphere it has a very significant impact on the on the learners or the students mind in the sense that because they used to spent into 8 to 10 hours in the school campus and they get socialized, they get the opportunity to to you know interact with lot of people with the teachers.

So, it is a social learning platform. So, not they not just learn about the subjects and academics they learn many social skills many time many life skills many and they also get the opportunity to brush up to nurture their potentialities to express themselves. So, it has an it has got an overall impact on their personality development on their individuality and ultimately it must be related to the well being. So, all the starting from the physical space to social and pedagogical space to co-curricular activities to curriculum to content to you know technological tools used all these things comes under the context that is the place of the campus. So, similarly it should the environment should be free from bullying and intimidation all kinds of things and all well being oriented teaching should be practiced and it should and how diversity should be embraced and how the teacher and the school leaders they should develop a inclusive environment.

culture, work culture inclusive teaching learning campus. So, everybody can feel safe and they feel they take the pride of being the part of this and they can they are then very relaxed very they are stress free and they can not just learn they can also make many effort and utilize and try to explore their own potentialities. So, in this way and it is it can improve the visual of not just visual appeal of the classrooms or the ambience of the schools etcetera. But, also it provides a kind of adopt a green technology, green learning, green classes, green schools with all kinds of natural resources, natural light, positive discipline all kinds of as much as possible eco friendly and the green things. So, it makes in this way it makes it can be converted the happy schools, happy classrooms can be converted into the green school. So, happy classroom climate happy classroom climate primarily focuses on strengthening the socio-emotional learning that is it is not just about the intellectual things is not just about the content learning or the cognitive learning, but it should be equally focused on boosting the social and emotional learning.

Social and emotional learning that the child should get the opportunity to. learn about the social skills, social perception, social desirability, social behavior etcetera. And how he can be an effective person in a social context, in a group context, how to collaborate with others all kinds of social skills as well as the emotional learning that that makes him that environment that learning environment that can make him more confident, more happy, more reliable, more authentic and also emotionally intelligent. So, these are the concepts

of primarily focusing on not just intellectual content, cognitive content, but strengthening the social skills, perception abilities and the emotional learning, emotional skills, emotional intelligence. So, in social emotional and ethical another value another thing is can be added that is ethical perspective social emotional and ethical perspective.

So, in this context social emotional and ethical learning model. So, the domains like the personal domains individual growth individual personality development or the holistic development of the learners in terms of you know adding value ethics meaning. meaning to the personality development of the learner and social skills social development social skills etcetera. And systematic how to develop the system how to or how to develop a learning model which would is which is very systematic organized and structured. So, it can you know it can fulfill it can capture to the all these kind of social emotional and personal needs of needs.

of the learners. So, it can it can be. So, it can identify the awareness. So, in this framework it can identify the awareness, the compassion, the engagement, what should be the proper learning engagement of the learners, what is the compassion, how it should be demonstrated, exhibited in interpersonal relationship and how all the learners should be aware of not just about the social issues or the classroom issues or the school issues, but about the environment. about the environment conservation, etc. So, now, coming to the happy lessons again. So, happy lessons should be that is in the personal context that is happy learner. The learner should himself develop self-awareness, self-management, self-regulation by integrating the mindfulness techniques.

Mindfulness techniques you know we have already discussed that being mindful being present at the moment and enjoying that moment without judging anything else or without focusing. So, integrating mindfulness techniques. So, in happy lessons For the personal develop personality development individual development growth individual growth of the learners and making them happy learners. These kind of components can be added that is happy self awareness thing kind of thing by introducing you know or a contemplative learning reflective learning self management how to manage your own academic and non academic affairs that is. by developing the self-efficacy, self-academic, self-regulations, then in by and again to strengthen it to enhance it how mindfulness techniques can be embedded.

So, that it cannot just it enhances the will power, motivation and mental health of the learners, but also it can reduce the stress, it can reduce the negative emotions. So, now, then the social the social context of happy classroom is that how to create the awareness about the relationship skills about the interpersonal relationships that is covered in the not just in the lessons, but in the practical field like sports through sports through surveys

through social activities. So, in the social and the playground. in the you know in the social useful services projects lab come lab laboratories. So, how to strengthen this kind of positive emotions positive behavior by strengthening the compassionate and empathetic awareness.

So, these two terms being compassionate and empathetic towards others this is the core you can say the core philosophy of you know developing the social domain social domain of happy classrooms. And third one is that engagement that is happy environment how to engage. the learners in such a way that they should they would feel responsible. So, that responsible they are that is not just the ownership that not just the ownership taking, but also being responsible for the whole environment, for the whole campus, for the whole school that mean for this whole community.

So, that in this process they can learn how to take the responsible decision. So, responsible decision making is the covered through these techniques like interdependence mapping, happiness literacy, happiness you know happiness you know how to spread happiness message through art, through sports, through co-curricular activities, through paintings and other kinds of things. So, how the learners should be engaged in the classroom environment. school environment, happy school environment that they learn this higher order social skill, higher order cognitive skills, higher order emotional skills like decision making, like helping out others through being compassionate, being empathetic. So, all these kind of both social and emotional skills as well as the responsibility of decision making that is right decision they can take.

So, these kind of development can take place. So, these are the schematic representation framework of the happy schools with the social and emotional learning environment. Now, this is also sustainability, how sustainability is not just something to learn, but it is something to leave, something to achieve, something to make a part of our daily life. So, green schools, so similarly here green schools primarily focuses on four major aspects, one is school governance. facilities and operations available teaching learning environment and content and the community engagement. So, in so how again happy school how to that means sustainable happiness means how happy schools can be converted into the green school.

So, green school can be happy and happy school can be converted can be happy can be can be green also like. So, by focusing on these four aspects along with the happiness curriculum content practice etcetera. But if you focus on these four domains, then we can make it a green school, we can also make it happy classroom as well as the green school. So, school governance, school governance which primarily fosters the green ethos. Green ethos means to reduce the carbon footprint, to adopt that means to adopt the sustainable

practices like not to create unnecessary waste, how waste should be dispersed, how waste should be managed, how to you know how to you know take care of our environment by not just through plantation not just through greenery etcetera.

But by changing our behavior to sustainable practices less use of carbon carbon footprint less use of carbon the you know hard copies or the carbon emitted things. And how and again how this waste should be reprocessed you know through through gardening through agricultural practices. and for running the some set of you know administration also how to run smoothly eco friendly and you know very and socio emotionally conducive way. So, some policies rules and policies of governance would also be designed with resources with the allocation of the resources towards sustainability practices. How like how we can we can go green in our administration, in our curriculum, in our How maximally you can go green by minimizing the carbon footprint and moreover by conserving our environmental ecosystem, environmental resources and again how to take care of our ecosystem environment through for future also for future generation.

So, with regard to space, with regard to energy. with regard to you know resources you resource utilization everything. So, the governance school governance must have the policy green policies going green policy and sustainable policy to run the business to run the practice. So, that we can you know we should create the minimum carbon footprint we should elicit the minimum carbon footprint and whatever carbon footprint has been created. how it can be subsidized, how it can be minimize, how it can be convert and transform to transform to transform to resources that is through transformative learning. Now, the facilities and operations related to you know schools indoor facilities, infrastructure, daily operations of the operations and the classroom transactions both the and even technology also handling the technology.

Connect with the natural world and again all technology use digital tools etcetera at the same time directly connecting to the our natural environment that is our through greenery the green practices. All these things facilities and operations would be there. So, that and again teaching learning that infuse the ESD. So, in teaching learning practices curriculum everywhere ESD should be embedded. So, ESD goals objective sustainability competence should be highlighted in the course curriculum etcetera teaching learning process and curriculum etcetera.

Then, community engagement that the it extends the school sustainability efforts practices by collaborating with the surrounding community. It is not just happening within the school, but beyond the school in the locality in the community. So, that from the school we can go beyond the school and we can make the community more sustainable and green community. So, because now happiness and well being are actually the outcome the

outcome of these green practices of these sustainable practices. So, when we talk about sustainable well-being, sustainable happiness definitely it is going green or sustainability is embedded, it is understood, it is mandatory, it is implicit, it is an implicit feature of that sustainable well-being practices or happy classrooms.

So, as a green pedagogy that is the whole school approach that we have just discussed about the whole school approach means the if you want to convert our happy schools to the green schools. Then we have to also adopt or adopt the green pedagogy that is whole school everywhere, everywhere there is going green as minimum carbon footprint as green as possible. So, the school must have a wider vision. So, and again the friendly pathways, the violence free schools, open and green learning space, democratic school environment and you know how the school leaders they can you can they get the feedback and they can get the insight from the teachers, students and from the stakeholders, from the community people. So, that it can help them in creating a school vision statement both in the explicit school level goals as well as implicit norms and values and that should be communicated to every stakeholder.

every learner, every teacher and the community people. So, the community people should feel that yes it is for us that means, it is not the school, but it is community, it is the community school. So, celebration of traditions, rituals etcetera all these things are to be embedded in the green pedagogy and the whole school approach, whole school approach that is the whole institution approach taking the school as a whole. that is green institution to make it more green, to make a green school, to make a green institution. So, similarly the whole school approach of primary focuses on different kinds of activities, clubs for sharing the experiences, talents, etcetera.

And you know they should also focus about the climate action. The teachers should also focus and demonstrate and explain, narrate about the climate change challenges that we are facing. And they should elaborately, explicitly talk about school governance and the what makes us happy what are the unhappiness what makes us unhappy what are the negative emotions what are the negative or unsustainable practices they should explicitly elaborate on these things and take the and my there must be mindfulness room practice room and they all the students learners they should be engaged in mindfulness activities and the green activities there should be proper structured routines should be followed and you know followed and focus would be on happiness but as happiness and well-being but at the same time sustainable practices So, now, so mindfulness as we know it is mindfulness it is driven doing that is being present at the moment in the moment feeling and feeling the you know when we are engaged in deep breathing feeling the breathing process and without thinking without any thinking about anything. So, these are some of the yogic practices poses mudras you can say that we can practice during mindfulness activity and these are

the different stages of mindfulness that you can go through it and you know. So, mindfulness and definitely mindfulness and happiness as in certain research these are some of the research findings empirical findings who found that meditation practices actually enhances our cognitive our mental health our happiness.

even our intellectual capabilities also. So, meditation can also you know gives us a mental flexibility, cognitive flexibility to reflect on our own actions, own behavior, own thought process to enhance our self efficacy to you know to slowly learn about the contemplative practices. So, how the human mind can is you know how with mindfulness how we become calm and quiet poised and focused become more focused these are some of the empirical findings. And sustainable happiness and well being you know building the sustainable future these are some of the benefits. And some habits in this process we in this process of sustainable happiness and well being we also learn certain habits of mind which are very authentic, very relevant, very useful to achieve the sustainable happiness. So, you can say the person's chronic happiness level is governed by three major factors that is a genetically determined that set point of happiness that is heredity that we have already discussed in you know Lumbescu's theory happiness relevant circumstantial factors are important and relevant activities and practices are very important.

So, now in this way mindful activities can be initiated among the learners. Thus these are the habits of mind to promote happiness that is we can go through it that is these are the some certain habits of mind for promoting sustainable happiness. Habits of mind can contribute towards the intentional activities that are more influential for happiness that listening and understanding with empathy, flexibility, thinking flexibly, interdependently and open with open mindedness, thinking and communicating with clarity and precision, thinking about own thinking, helping nature and being compassionate, you know spending time with inner self, individual self in understanding our own real self. So, these are some of the simple ways of sustainable happiness. These are the benefits of mindfulness by enhancing our working memory focus and by you know by enhancing our competencies being more resilient, being more optimistic and more these are the some of the benefits of a great benefits of the mindfulness.

are the some of the examples of the happy schools action plan and your happiness. Similarly, suppose we are practicing all these things that is green school and happiness curriculum and happy classrooms, but again suppose we want to check our progress for monitoring and evaluation we can have this monitoring board and we can have a framework to monitor it and evaluate it. So, that we can map our progress. So, this is the example of you know happy school curriculum framework. This is an example of which has been given in the manual and the guide of you know happy schools.

And these are some of the learning resources that I could collect from internet and giving it to you. You can more explore more on this topic now.

Thank you very much. I am just concluding unit 2 module 2. are here right now. Thank you very much. In the next week we will go with some other topic related to sustainable sustainability and happiness. Thank you very much.