Training of Trainers
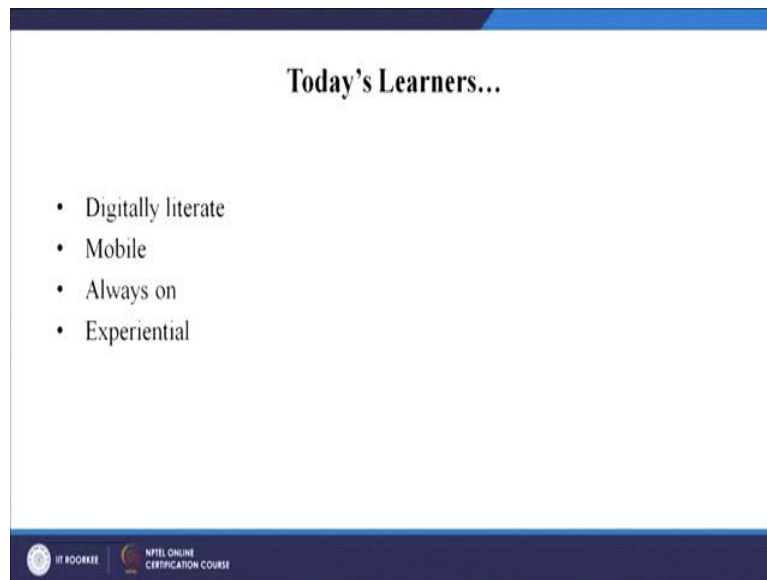**Professor Santosh Rangnekar**
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Lec15
Role of Technology - II

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In the second part of the role of technology in training, I will start with the todays learners from the other side, now you see in the first part we have discussed about that is the, what are the different use of technology in the training programs? Now we will talk about that is the how todays learners they are learning, so one is the digitally literate, there is a change, changes that is the trainees those who are coming there also more tech savvy.

So trainer is also require at least the equally tech savvy, only in that case he will be able to develop that repo and balance and if the repo and balance is required, then this the learners because they are digitally literate, so the trainer is also require the digitally literate, so he can talk in the same language. Second is that is the mobile. Now, I would like to share that is the at many places that mobile is becoming a very, very popular with the help of the social media, it is becoming very, very popular to make a use for the training program and these can be communicate at a fast and this can be messaged very fast.

So that way the trainees, the learners what they are? They are more, more mobile savvy and therefore if they are that much mobile savvy we have to think of making the use of this such popular gadget for the purpose of the training programs. The third one is the, they are always on, so whether it is a midnight or the daytime and every time you can message immediately

and you can share and therefore if a trainee wants to learn at a midnight to 2 o'clock something, then definitely he will be having the easy access on technology and therefore he will be in the mid that also whenever he gets the time or somebody in the midnight has got stuck.

I have shown the one slide of the doctors in the medical professional also, so therefore, in case of the emergency also, the role of technology we can help to the family members of the patient or for the other doctor, to the other doctor that can be also is important, so that the todays learners they are always on and they can learn.

Now, today's learner is more and more interested in the experiential, there more creative, more innovative and therefore their ideas because of the technology, exposure to the technology, so therefore they are having the more experiential and if there more experiential is there, then definitely in that case they can do more and more experiment also and as a result of which we will find they are socially connected, stay connected every time, so the area of networking that is very much increased and if the area of networking is increase, therefore the learn and unlearn practices are also increasing.

So learning of the technology and unlearn of the manual, now everything I will discussing with the advantages and disadvantages of these, but basically whenever we are increasing, so the type of the social stay connected, then it becomes very, very important, that is the how the people they will be able to work on this particular high level of networking, their efficiency, their learning, their connectivity and when their connectivity is so high, then definitely their learning speeds, speed of learning will be very fast and if the somebody is very hungry for knowledge, then definitely he will make the maximum use of the technology and performing effectively.

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Augmented and Virtual Reality

Now here, now you see this particular picture of the classroom and then you find that is the how young kids, they are making the use of the technology in learning and how they work, at this school level also and the primary school level, you will find that is the how the students are learning at this age and when they will come to the corporate or in the academia, in the working positions, then what level of technology will they have and then what will be there expectation from the trainer and then what will be the learning environment that we have to keep in mind.

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Mobile-based learning using QR codes

Now, here you see the another very beautiful and example and it is about the mobile-based learning using the QR codes and then if this type of the training is there and learning is there,

then the access, access is increase, economic it is and the faster learning is there, so this becomes the another example, this is the NPTEL on online certification courses will also be, I will talking about that, how they are working more effectively?

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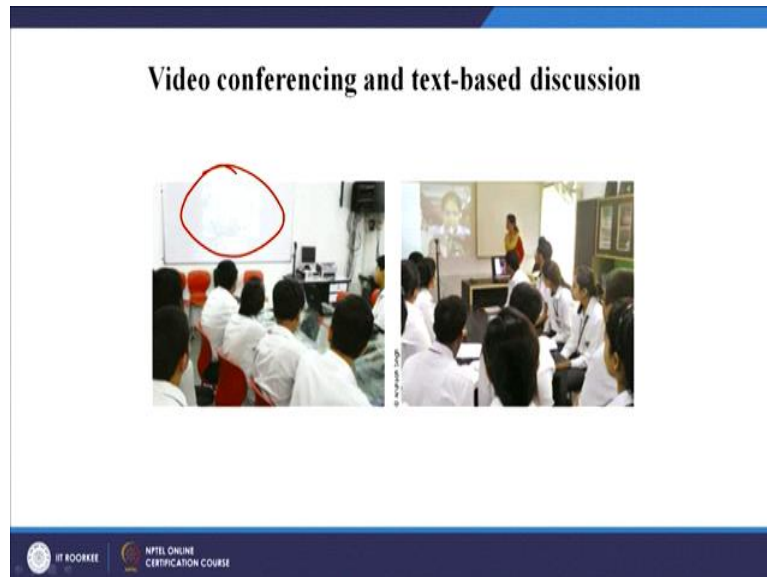
Now, here the videoconferencing and text based discussions are there, now here we see that is the whenever we talk about this type of the video conferencing, then definitely you will find that is the how it is becoming the particular place of learning for the people sitting at the distance, similarly the another picture, now you see the era of learning, it is the era of learning and therefore the technology is such a wonderful gift, right from the childhood we are writing or essay whether the science is boon or ban.

So naturally there will be some disadvantages also, but definitely when it is use for the betterment of the human kind and then our objective and goals are very constructive, our objective and goals are to serve the society, our objective and the goals are to keep the society healthy right, progressive, educating and then this type of this particular training programs, you will find they are becoming very, very effective and how these learners and this trainer she is making the use of technology and sharing the knowledge.

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WhatsApp community of practice (CoP) for Teachers

Now this is the another important aspect, it is the WhatsApp community, WhatsApp community of the practice COP for the teachers is there, as they are the making the common learners group, you will find a trainers group are there, very federation of trainer is one example and then when we talking about the learners group, then this is becoming very, very popular that is the how trainers the are connected and they learn from each other and share the knowledge?

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Gamified mentoring App for teachers

Then for kids, it is very, very the impressive picture that is gamified mentoring application app for teachers and therefore when we are talking about the sharing different stories, lessons of moral right, then definitely we can make the use and we can also at the village area, at the

rural area, in the villages, we can make the use of this particular technology and the learning is that and trainer can make the use of this particular technology.

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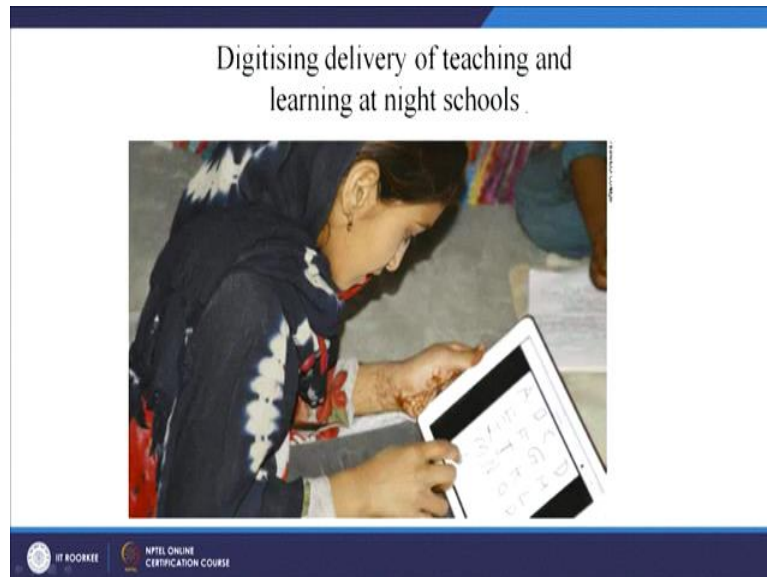
Now this is digitising delivery of teaching and learning at night schools right, so this is becoming the another example where we are having this type of this learning process are there.

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Now communication with the parents, now we know that is for the education purpose, for the learning purpose this students they are coming from the faraway place and they are living in

the cities for their coaching and learning practices, then, but the parents they are in constant touch, so that will be there.

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Teacher made videos to support learning, now this is an important point, now you see that is, we have to create our own videos also and we can show those videos, in the 1 model have shown you that is how we in our MBA Department of the Department of Management Studies IIT Roorkee, we asked MBA students to make the videos in the recruitment activity or the training activity or create your own organization and make the role-play and the behaviour modelling.

So these are the certain areas and incoming lectures also I will be demonstrate under this course also, that is how a teacher can make videos and then make the use of those videos for the purpose of the learning, many trainers they are not making these recordings, how they are very, very efficiently conducting the classroom management, if the recording is done and then that has been documented properly and that there is a proper management of this documented videos, then definitely the access to the learners that will be extended.
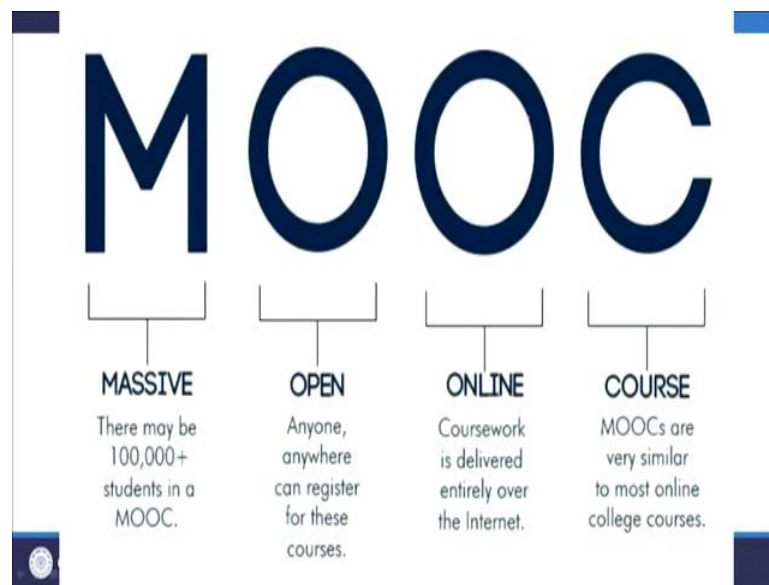
Now there are massive open online courses as we know, like here I will take this is M examples of the certain courses and then when we talk about the interactive learning and when you are talking about the online learning, then we are talking about the massive, there may be more than 100,000 students plus in a MOOC and then the open, anyone can access from anywhere and can register for this type of the courses and therefore these are becoming very, very popular.

I remember that during my visit to Japan, the one Professor from Japan has appreciated and talked about the MOOC programs and said that is the, "Yes, this is very great initiative and therefore the, you are creating a community of learning and that community of learning will educate generation and that educated generation will definitely working for the betterment of society for the national and international level, for the whole humankind."

Then online programs are there, the coursework is delivered and tell you about the Internet as we are talking about and the courses are very similar to most online the college courses are there, and I am very happy to share with you that is the number of instituting, including the National Institutes, they have given the recognition of this type of the courses in their coursework and if, I will just tell, like to take one example, for example in the case of the specialization is in MBA.

So person can along with this credit courses in single specialization, dual specialization and maybe specialization into the three courses which is requirement by the different organisations, in any one of the specialization they may have, so that is extending the

placement and employment opportunities and they are helping into the developing the employable skills and therefore this type of the additional courses I am talking about, some courses are also accepted for the pre-Ph.D. courses.

So, therefore those, some universities have created this type of the recognition for this type of the courses and if more and more courses are approved as the, they are the credits, earning for the credits, earning for the their course, then definitely this becomes very, very important, like in the DOMs also with the HRM specialization, this type of the courses they have been approved and the students can take and increase their credits and if they increase their credits then they will be eligible for the different type of the competitive exams for placement.

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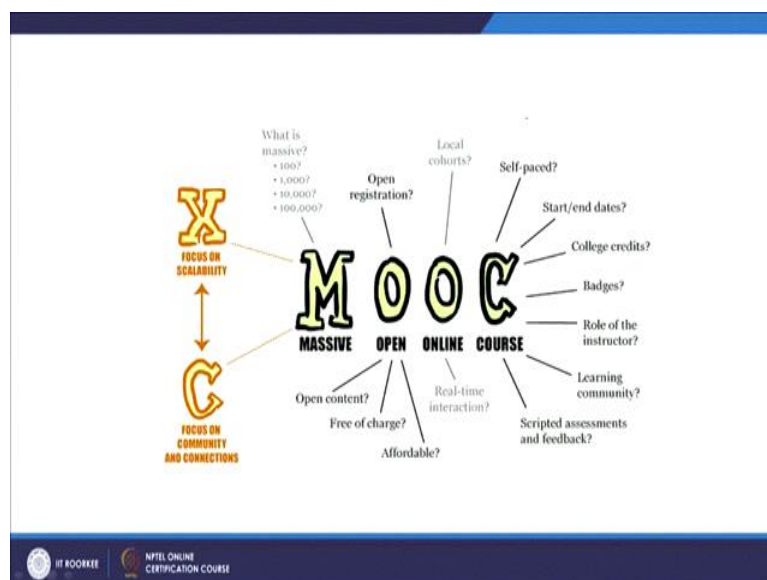
Now, here when we talk about the numbers, so numbers is increasing, the open registration, local cohorts, then the self-paced, start dates, college credits, badges, role of the instructors, learning community, the scripted assessment and feedback. Now this is also is important that is there will be the assessment and feedback also, then the real-time interaction will be there on online, then it will be open content, free of charge and affordable as we focus on quality and connections there.

Now in general, I will talk about the role of technology and the learning, so in generally the whenever we are talking about, like YouTube and Internet access courses or Internet access the skills for example, any software for analytical methods and then the learner can easily access to that particular source and then see that is being, there is no fees, just he has to make

available the Internet connection. So if Internet connection is available, so without any fees open sources, the person will learn and therefore no tuition fees is there.

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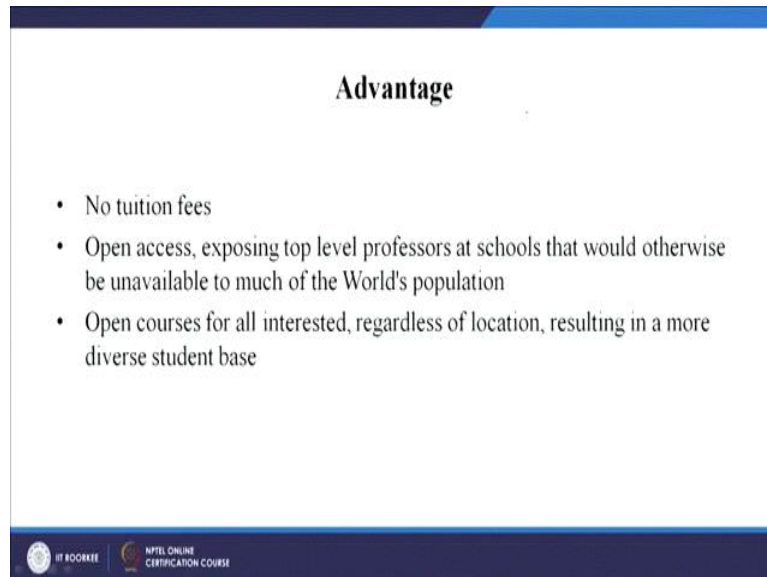
Then the open access, exposing top-level professors at schools that would otherwise be unavailable too much of the world's population in the global level. At the global level when the scholars, when they are sharing their knowledge and then that will be easily accessible and then it can be in the form of the documents or it can be the form of the videos and therefore open access will be there.

Then open courses for all interested, regardless of location, resulting in a more diverse student base. Naturally, I remember that is one course which I have conducted for the Hanyang University, Korea in the Asian business and then these queries and answering the queries when I was at Seoul for this teaching this particular subject, they were with the help of the technology was very much common and resulting in a more diverse student base and if I am not wrong, there were more than 23 countries, the students were registered for that particular course, so this type of the exercise is also possible.

Students can collaborate with their peers from different parts of the world, so not only the learn from the International trainers, but they also develop the peers at the international level and when this help in the cross-cultural learning, if there is a more cross-cultural learning that there will be more exposure and understanding of each other's culture and an learning environment will be created.

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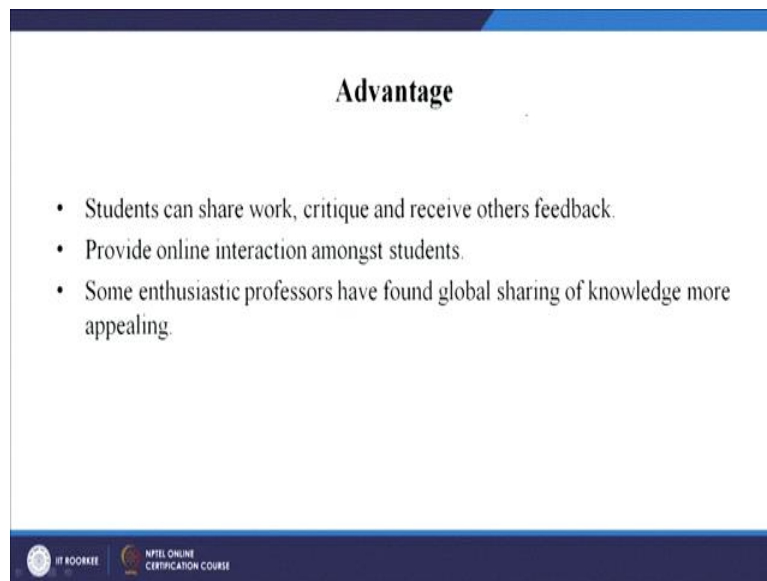
Further advantages are the students can share work right, therefore when we talk about the peer learning, so in the peer learning someone has done good work and that can be a role model for the others, and then there will be the that feedback, feedback can be there and when we received the feedback from others, then we can, it can be motivating also, sometimes it is the somewhat suggesting also and then if it is suggesting and motivating than in that case we can go for the particular program.
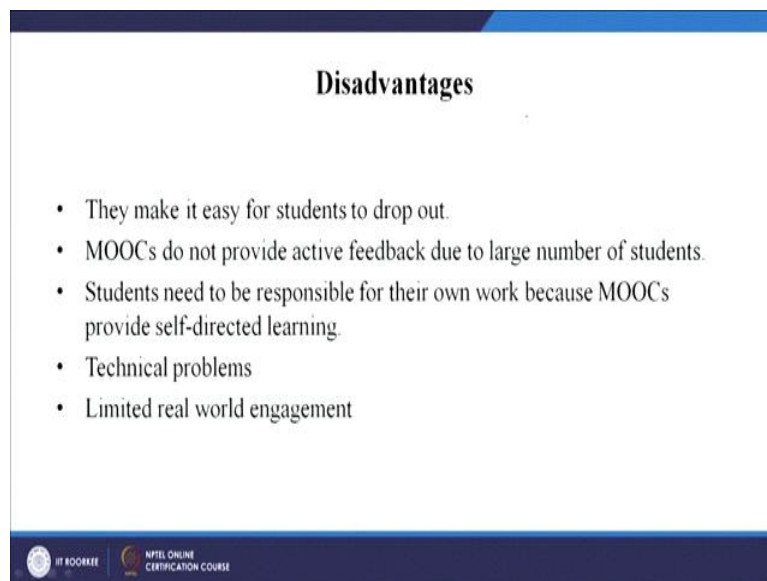
Then they provide online interaction among students, which already have mentioned, some enthusiastic professors have found global sharing of knowledge more appealing, so naturally all of us what we are looking for? We are looking for the learning from each other and making these knowledgebase wider and strong and therefore this type of the sources they are making the more and more access to gain the knowledge and expand the canvas.

Then, in this MOOCs them revaluate their pedagogical methods, while improving knowledge sharing, definitely the methods by the pedagogy because when we are having the open source and when we access to this type of the knowledge sharing databases, then we also know that is how other peoples they are making the sharing of knowledge, what pedagogical systems they are using and then we can incorporate those pedagogical system and then we can make use in the classroom.

But every coin has two sides, so we have talked about the advantages, but there may be certain disadvantages for the use of technology, so every students like in the regular courses we may compulsory and then the one student is registered, he is registered for full course

while in case of these online courses, it is been seen many time the students and most of them some are the experience one, if they are experienced one, then definitely it becomes sometime difficult for them to continue and they may be the dropout. So the drop out in the case of the regular courses are very less as compared to the dropouts into the open source courses and therefore that we have to take care, that is the learners they are able to continue and finish their course properly.

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Than active feedback due to the large number of the students is there, so therefore, it is not there, there is no active feedback is there, need to be responsible for their own work because MOOCs provides self-directed learning. Now this is also one set of the disadvantage because sometimes what requires? Push is required and if the push is there, then only the student will be able to learn, if like the first point, that is, they make it easy for students to dropout and then in the third point if we see that is the, if we because of the open source it becomes less compulsion and what is required then? Then that is required a self-directed learning, self-motivation, self-motivation is the best motivation.

But because of the certain and environment and when we talk about the learning environment scenario and that learning environment scenario can be done with the push, push to the trainee that no, you have to do, like a mother tells to a child no, you can and you have to do, so similarly the trainer has to tell that is the yes, you can and you have to, but in this type of the, with the use of the technological programs, it becomes difficult for sometimes in a critical situation the learner may drop out stop, to avoid these that motivation is required.

Now, I have mentioned that it is the very few people are having this type of the access, so there will be the technical problems and if there are technical problems are there, then definitely it will be difficult to continue with this type of the open source programs, people may not have access, people may not have continuity and if there is no continuity they will find it difficult and motivation will be low and so whenever they want to access, the access is to be available, but it will depend on so many infrastructure facilities and if infrastructure facilities is not strong, whether into the city or maybe into the village right, even may be in city.

So that infrastructure facility, that is Internet, Intranet, access, if that is not strong, then definitely because of this technical problems this type of the program, they will not be preferred by the learners. Many times, then actually we talk about the, that it is a global access is that but the, what is important is, that is the than it is in the classroom, in the classroom the trainee he is able to relate it with his real-world and if he finds difficulty problem, he immediately asked that is how I can get connected with this real-world or problem.

But here in this case because in the it is online, so there will be the limited real-world engagement and if the real-world engagement is limited the learners motivation, learners expectation will be difficult to match, so these are the certain demos are there about this particular MOOCs programs are there right okay.

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Daphne Koller and Andrew Ng of Stanford are adding 12 universities to Coursera, the online education venture they founded.

Now, you see in this particular point I would like to take, that is universities reshaping education on the web, now the Daphne Koller and the Andrew Ng of Stanford are reading 12 universities to Coursera, the online education venture they founded, now you see that is, these are the different efforts are made, the high-class level efforts and this can be done at the, by the trainers at their end also.

So therefore if their side, they start this types of the online training programs, many of them are doing, but they still I feel that is, there are the more trainers are required to connect and therefore that learning and sharing and the creation and storage and then the use and the distribution and assessment, these that will be very, very important because when we talk about the Wendi Ruth model of the knowledge management and therefore it is the to get because this is the easy to get right, easy to use and after certain extent, easy to learn, but and easy to contribute.

But to build and sustain and assess and divest in next to three steps right, so because where the, it is not classroom and physically trainer is not present, then it becomes challenging, but here these type of the efforts which are giving us this advantage, that is the how the 12 universities to the Coursera that have been added and if this type of the universities reshaping is there on the web, a global learning Village is created, so this globe is becoming the learning Village because of the role of technology and understanding.

Now, what is happening is that is the people, many people are trying to educate others and with the help of technology and many times it is the free of cost, it is open source and therefore it is very, with the very, very little efforts the one can learn and the one can learn in the different areas of knowledge, one can learn different levels of knowledge, one can get associated with the global high-class trainers and can get access to the those universities that they had living for and therefore this type of the motivational environment and the communities, communities of the learners that will be developed.

So the single most important experiment in the higher education that has been mentioned, that is online education platform Coursera wants to drag the elite education into the 21$^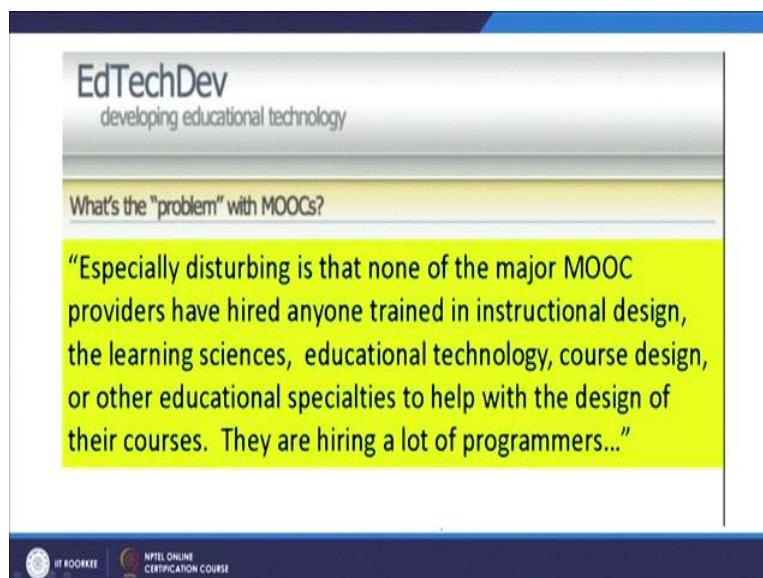{st}$-century and now it is getting buy-in from the academic. But that is Coursera announced Tuesday may well prove to be an inflection point for online education, a sector that has traditionally been dominated by for-profit colleges known mostly for their noxious recruitment practices and poor the results, so therefore this type of the challenges are there.

Then the EdTech Dev, it is talk about what is the problem with the MOOCs, disturbing that none of the major providers have hired anyone trained instructional design, the learning sciences, education technology, course design or other educational specialties to help with the

design of their courses, now here we have talked about that is how to design the training programs? And therefore up to certain extent this type of the training program, they are helping to overcome all this type of the problems that is how to design their courses and they are having a lot of programmers.

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So finally I would like to come that is how to plan and run a MOOC in 9 easy steps that is the topic and audience is there, find someone to teach with and determine the content and a plan spaces of interaction, what is important, what I feel is that, that is the this type of these programs they are overcoming this type of the issues, but in the previous slide that mention about that is the design of their courses, this is becoming a very, very important point, that is the and we have talked about that is the, how to design of your training program and therefore

not only for these the training programs, but the course design right and making the use of technology that is becoming the very, very important.

So here when we talk about the for the trainers right, that is how to determine the content? Because contents are becoming very, very specific and if we determine the content, it becomes the designing of the program and therefore when we talk about that is what should be the content and accordingly, we will design the training programs and then we will have the learners creation activities, this is very, very important, that is the hands-on, hands-on learning right, that is becoming a very, very important, if we are talking about the hands-on learning or when we talk about the OJT, I have discuss this at the time of the types of the training programs and that is creating the more and more, these spaces for the interaction.

Now simple example, I would like to give about the PPO, when we are talking about the PPO the PPO pre-placement offers and this in the case of the placement of the students, it is the expected that is, the more and more industry, academia, interaction and industry will offer more and more this pre-placement offers PPOs, so for that purpose the course content training programs, the training, the hands-on experience and the delivery that is becoming a space for interaction that is a organization and therefore, in that case, this is becoming more and more live and asynch is there.

Then the plan your continued presence, this is very, very important that is whenever we are talking about the trainer in this type of the training programs, then his availability, his access that becomes very, very important and you have to create that access and that learners creation activities, that is becoming how you are continuously presence, if you are continuously presence, available to a learner and then they can make the access, then easily to the trainer, then definitely that will help the trainer that is how to make the training more effective and for that solving the problems of the trainees.

If trainees are facing a particular problem, then they can overcome by interaction, the space for this interaction, maybe online and with the help of technology and then the distance and difference between the trainer and training in this type of the programs, open source program that will be minimize, so technology can be used to minimize the distance and learner then he can create the number of activities.

Now we will also demonstrating certain activities in our the next session and there, in the role-playing and behaviour modelling, so that will give an idea that is the how this type of the

training programmes that can be conducted, so this type of this, in spite of those disadvantage which I have discussed earlier, what is important is that promote and share the knowledge, more you promote and share the knowledge better will be the popularity and better will be the access to this type of programs and finally iterate and improve and therefore in that case, naturally, nothing can be that much, every time perfect and that much perfect.

So this is a continuous process of learning, we have to keep on improving, improving and improving and whatever the demonstrations which we are showing, those demonstrations we have to find out, because we have to find out this strengths and witnesses. And from this strengths we are supposed to get the opportunities and from the witnesses whatever the threats we are getting that we have to overcome those type of the threats, it is important that is we continue, continue with our aims, objectives, the training programmes, the contents and understanding the audience and making helpful to them.

So they can feel it is a regular program, they can feel that yes, I am learning, it should not be get, the learner should not be get demotivated at any time and he should find out that is the whatever content are there, if we find any difficulty how he can access to that particular difficulty and this way by continuous process of doing and improving and learning and again improving and learning and extending the access made available to the learners and the whatever the continuous presence is made to learner will give a feeling that he is in the process of a continuous learning.

So this is all about the planning MOOC and making this type of open source programs very popular, so here I will end about the second part of the role of technology and how to make the use of technology into the training programs and this type of the courses that will be, I wish that will be more and more by the trainers like you and make it popular the method of training. Thank you.