Training and Development
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Module - 11
Lecture - 54
Trends of New Technology used in Training

Welcome to the course on Training and Development. We are on module 11 where we are discussing on the future trends of training and development. In the lecture 4 we are going to discuss on the Trends of New Technology used in Training.

As you must have seen like we are discussing much on technology in this sessions we are we have discussed introduced technology use of technology in training on session like module 9 sessions and also like while discussing this from the start of like 11 also we are discussing technology.
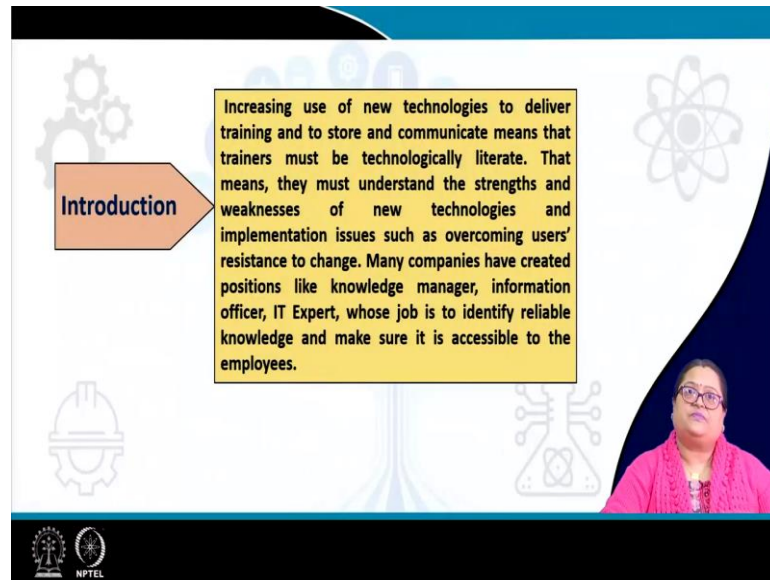
Because we have to understand like the future is moving towards that. And we have to get ourselves accustomed to it, we have to understand it get ourselves trained on it, and welcome it in our training, deliverables, instructions, course content development, understand the nuances of it and be prepared for it. So, here we are discussing on the major trends of new technology feature used in training.

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So, this part of the lecture session will be held on the trends of new technologies used in training and development.

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The increasing use of new technologies to deliver training and to store and communicate means that trainers must be technologically literate. That means, they must understand the strengths and weaknesses of new technologies and implementation issues such as overcoming users' resistance to change. Many companies have created positions like knowledge managers information officer, IT Expert, whose job is to identify reliable knowledge and make sure it is accessible to the employees.

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What is the future of workplace training? What we have discussed earlier also, a hybridized form of learning is slowly becoming the normal method of teaching in most training environments specially, in the workplace. Businesses are beginning to accept like the work from home culture that adopting blended learning combining traditional face to face learning and teaching with electronic and online media such as videos, self paced online modules, and digital aids.

While advancement in technology is phasing out outdated methods and structures they are also creating new pathways to propel the world forward. The workplace will know have will really have no other path to take.

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Now what are the various ways of using new technologies in training? The latest HR management software can be used to manage employee career development path. Training can be developed and administered completely online that is sometimes even without the assistance of an instructor. LMS can also serve as a repository for optional training materials, allowing employees to self serve and get or request additional training as needed.

Online training can be made interactive including quizzes to assess understanding. Training can be administered by way of mobile applications, allowing individuals to complete training truly on the group go.

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Now, what are the future of new technologies in training? Some computer-based training software which commonly used in training are; Canvas, a cloud-based learning management software. Kahoot, it is also an LMS and it helps to create online games, interact with learners' etcetera. Google Classroom, it is a cloud based LMS a part of Google Apps for Education. Adobe Connect, it is a web conferencing solution that allows users to conduct online meetings, webinars, and interactive training sessions.

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The some of the future of new technologies in training also like Talent LMS. It is the LMS build for training success, designed to get a yes from everyone it is where great teams and companies go to grow. Articulate 360, Storyline 360 is a cloud-based solution designed to help organizations produce and publish interactive video-based eLearning courses.

Schoology is a cloud-based learning management solution specializing in curriculum management course instruction and system-wide resource sharing and collaboration. Blackboard collaborate it is an online collaborative learning solution designed primarily for elementary and high schools, higher education and government facilities.

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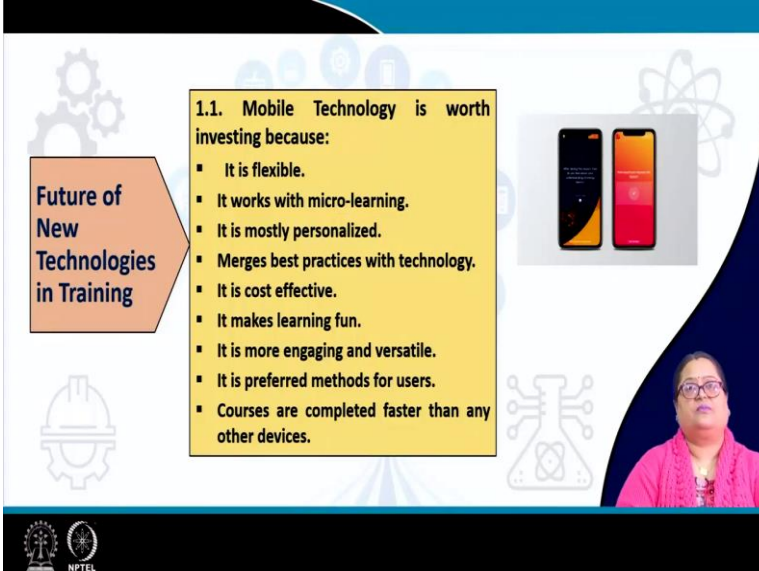We have discussed about different forms of new technologies in earlier lectures. Here we may discuss the future scope of each technology, which I used in training. The first technology which is becoming very important that is the mobile technology.

There are increasing trend that almost a larger part of online marketing is used is viewed on smart phones. With the increasingly remote nature of education and work, academic institutions and employers have needed to rely on online learning platforms to help train employees and teach students.

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The mobile technology is worth investing because, it is flexible, it works with micro learning, it is mostly personalized. And so individualized learning program is best suited like when it is mobile technology based, merges best practices with technology, it is cost effective in nature, it makes learning fun, it is more engaging and versatile, it is preferred method for users, courses are completed faster than in any other device.

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Second is the video-based training. The in the digital world in which we live today the web browsers offer us the ability to mix and match media in one page. Watching a video becomes only one part of the learning experience for video-based learning. Videos can become more engaging by inclusion of simple poster frames, scrub bar thumbnails, chapter markers, playlists etcetera.

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It can be more interactive with the addition of explanations, additional pictures, tables, questionnaires etcetera. Video based training and learning are on demand and available to anyone and instructional designers are not the words leading the change. The video-based learning includes TikTok, Snapchat and Stories in a new light. What used to take

hours and hours of listening to video and typing the words is now done with the click of a button like the YouTube videos.

From the eLearning perspective, if the power of videos and interactions are clubbed, it sure has the scope to bring about better learner engagement, increased retention and in the long run increased performance, and business growth.
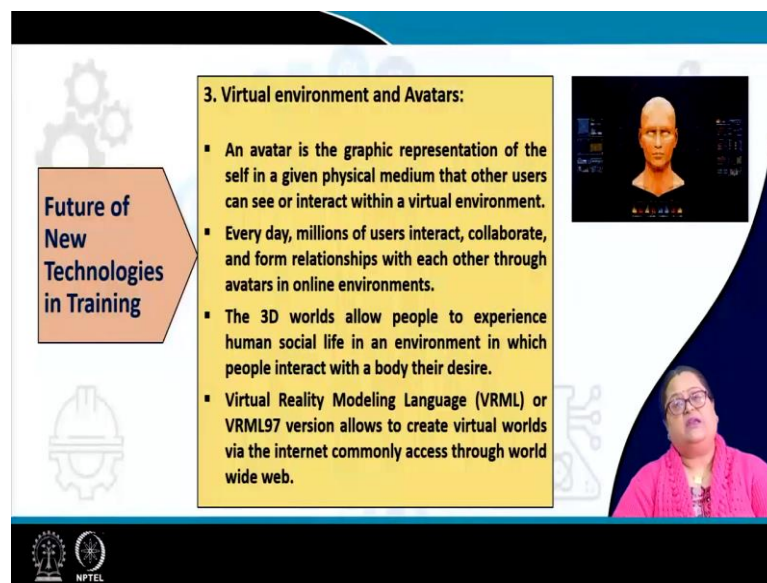
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The virtual environment and avatars: an avatar is the graphic representation of the self in a given physical medium that other users can see or interact within a virtual environment. Every day millions of users interact, collaborate, and form relationship with each other through the avatars in an online environments.

The 3D worlds allow people to experience human social life in an environment in which people interact with a body of their desired. Virtual reality modelling language or VRML 97 version allows to create virtual worlds by the internet commonly accessed through worldwide web.

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HTML5 and responsive design: HTML5 and responsive design and other technologies allow us to create a new form of multimedia centred on video-based learning. Where multimedia used to mean a special experience developed in special formats like CD ROM today it means all the media for all possible content consumption preference. A browser or mobile app-based experience is the norm. HTML5 and whatever comes next, is the platform for all future eLearning including the video-based learning.

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The HTML5 format is compatible with a multitude of devices, including computers, tablets and smartphones. The format is advantageous and engaging for consumers because of its accessibility and convenience. It is the use of ease of use and borderless

portability. It will allow students to take courses without worrying about downloading plug-ins so that they can progress freely.

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So, what we find over here, it is more flexibility, more of transferability, more of like switching between the devices which will become the trend in the future and which are going to stay. Because when people are using various devices they could be in various localities. So, they may what ultimately is like whether we are learning, how we are learning through what medium we are learning? We need to be more flexible about it.

And in order to give that flexibility the technology should be such like it is; like it is like adjustable in all kind of devices, and that is where HTML5 is going to has got its importance. Automation and adaptive learning: adaptive learning technology has been considered among top 5 deployed in 2020.

The new adaptive learning application has been evolved; to like faster become faster both in terms of capacity and data speed closer in terms of moving, cloud-based computer functions closer to the network age.

Smarter via automation analytics, artificial intelligence and virtualization capabilities, safer with technologies that increase awareness of network health to proactively address issues before they occur.

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Now what is an adaptive network? Recently this network has been coming up with a combination of programmable infrastructure, highly instrumented physical and virtual network elements in a multi domain. Analytics and intelligence, machine learning based platform that leverages streaming network telemetry. Software control and automation, that intelligently orchestrates multivendor components automates manual network processes.

Services, highly experienced technical and professional services with proven methodologies are requested to help customers build operate and continually improve their networks.

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Big data we have discussed this earlier we will be discussing the more on the like its future scope and where it is going to be used implications here in details. Education is progressively moving from one-size-fits-all approach to precision education or personalized learning.

The dynamic and stochastic learning the outcome of which involves some randomness and uncertainty, is gradually becoming the trend in modern machine learning techniques. Data are informatively and qualitatively balanced and adopting AI systems, in order to avoid implicit biases that may propagate into algorithms strained on such data.

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In a digitally-driven knowledge economies traditional formal education system is undergoing drastic changes or even a paradigm shift. Lifelong learning is quickly being adopted and implemented through online and project-based learning skills. Collaboration between academia and industry as well as balanced human and machine learning approaches are pertinent for vocational education.

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New technology-based platforms for training. Two new platforms have recently launched and have gained a bit of attention. So, it is worth taking a look at them. Byte it is eLearning courses that takes us back to the looping video fun of vine Tangi it is a YouTube style platform specially for crafters. All content is instructional content by and for makers.

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Individualized learning by using artificial intelligence to create adaptive learning systems and intelligent tutoring systems and by using technology to organize and implement modular, competency-based learning.

It is enhancing learner engagement by using game-based learning and immersive simulations that rely on engaging, incentive-based platforms as well as highly realistic learning settings to maximize engagement, time and task, and competence reinforcement these also in include use of three dimensional and augmented reality technologies.

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Promoting highly interactive social learning by using Web 2.0 social media, and other collaborative approaches as a way to generate both the learning content and the learning environment like, virtual words. Mining data to shape learning opportunities beyond a given TBL application by analyzing individual as well as Big Data to better understand the learning process and inform TBL design and synthesizing data to create transferable e-portfolios for learners to showcase their skills.

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Another important source which is helping to access improving access and scalability of the learners is by using open educational resources and publicly available instructional materials in conjunction with the increased availability of mobile learning technologies and applications.
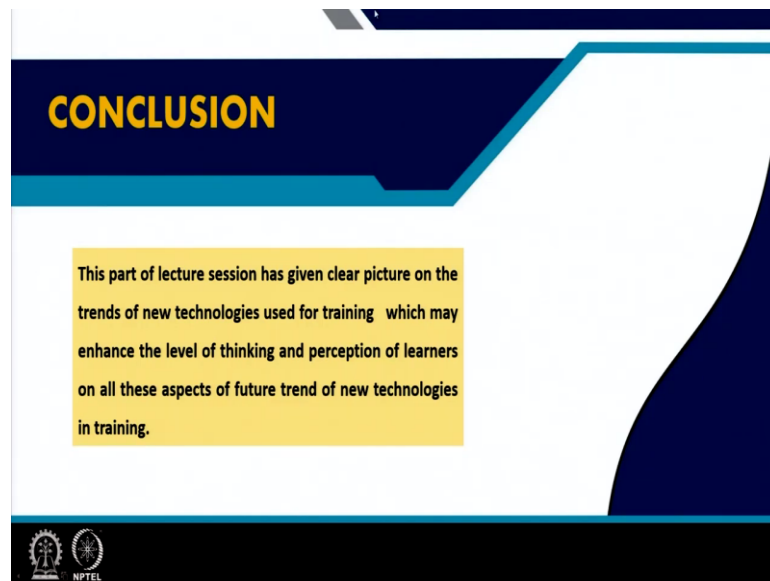
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So, these are again some of the references that we have used for the slides.

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CONCLUSION

This part of lecture session has given clear picture on the trends of new technologies used for training which may enhance the level of thinking and perception of learners on all these aspects of future trend of new technologies in training.

This lecture session was to again generate our awareness about the different learning options or technologies which are possible the uses of it we need to like if we really want to know much deeper about it its if we can go in understanding from other sources also like the references that has been given here. We can read through these slides or refer to those materials go for your own Google search to find more details about it, you can do some courses on these techniques also.

Because it is always better to do a hands-on training on how to like use these things which will like be complementing your learning from this module. And because giving you hands on experience on this thing is beyond the scope of this course.

But it is always like advice it is always suggested, like if you are reading about these technologies it is advisable that you also may take up some courses where you can know about the details of it have some experience do some experiential exercises where you can get to learn these things like a like hands on.

And experience it which will help you to use these things in a much better way in your real-life situations. Thank you for now we will meet you with another discussion sessions on the future trends of training and development in the next upcoming lecture.

Thank you.