

NPTEL
NPTEL ONLINE CERTIFICATION COURSE

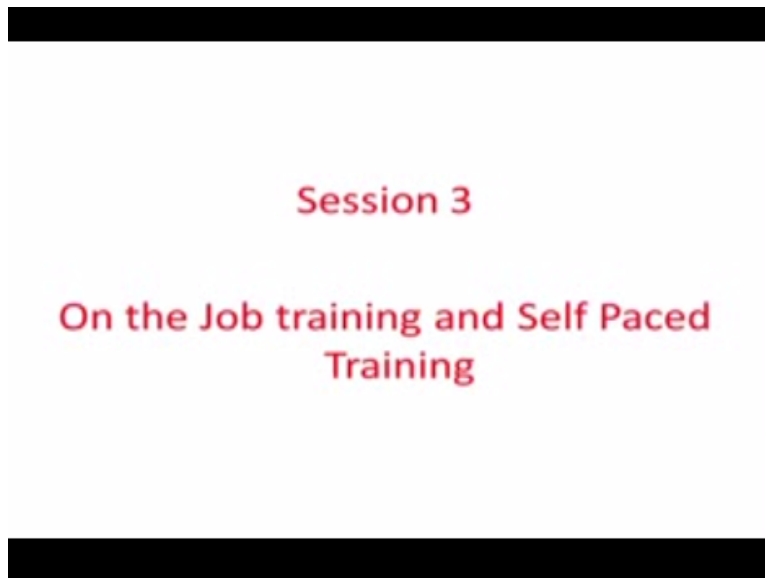
Course
On
Human Resource Development
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Lecture 18: HRD Process- 11(Contd.)

Okay so welcome to this next session.

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And in this session basically we are going to discuss some other methods that is on the job training and self paced based training, you remember before that you talked about class room presentation and experience learning as in effective methods to deliver training programs and finally we have on the job training and self paced training and here we are going to discuss about these methods and they could applied in delivering the training program effectively.

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On-the-Job training

- It includes **Job instruction training, Job rotation, coaching and mentoring**
- Training at one's regular workstation
- Facilitates training transfer to the job
- Reduced training costs, since classroom is not needed
- Noise and production needs may reduce training effectiveness
- Quality and safety may be impacted
- **Strengths:**
 - Realism
 - Applicability
- **Weaknesses:**
 - No formal structure
 - Can perpetuate mistakes



Now if you look at on the job training, on the job training means this kind of job this kind of training is given while the person is doing the job right he is not away from the organization he is actually in the work and it is provided and that is why it is known as on the job training.

The certain benefits of on the job training compare to off the job training like in the on the job training the person is there only so it going to be more cost effective okay expect could be in the hose okay because it could be very senior experience managers who is going to provide the this kind of training because they know how to perform certain jobs in a better way, now if you look at this on the job training you have to see various thing or activities that is to be carried out, or what are the various method of on the job training.

So it includes job instruction job rotation coaching and training okay these are the four methods these could be done, while a person is doing or performing the job, right now as I told you the on the training is means that person is going to retrain while he is working so it has been done on regular work station similarly you in better position to transfer your learning, on the job because this is what a you have been taught. So basically on the job training is not just passing on the information but it is more when you are trying to see that certain skill are been learn by the trainees and they are able to transfer.

It on the job, so basically they are told how to transfer a skills on the job right, in the third point is it is less cost effective okay, because you do not require a class room or other infrastructure resource the only thing that certain sometimes you know that in a factory environment and

working environment okay that kind of say environment the physical and the psychological environment that is required for this kind training may not be available physical training like no agent production need okay.

So it is going to reduce the effectiveness because there could be lot of noise and you won't able to learn or you will not able to concentrate it could be psychological, because sometimes the people are watching you while you are been trained, so it become more conscious thing if you are not able to learn people will laugh at you so these kind of distractions may be there while, on the job training which sometimes reduce the effectiveness of the training program right still it is very popular okay, and sometimes you know that you need to compromise the quality and safety because when you learning certain things okay, you do not know.


then may be on the people on the trace sometime you are in the production department sometimes it may be possible that you are able to produce product quality and thus specified by their status right but it has certain strength in the sense it is actually a real life learning in a real contest real life situation, on the job and you can apply the knowledge and skill immediate on the job these are the two major things of any on the job training program.

Right but the weakness is you know formal structure okay and you can lot of mistakes while learning right but looking at the learning this kind of learning experiences you have really could in strength because that is effective in certain cases and that why it is.

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Principles of On-the-Job Training

Preparing for Instruction	
1. Break down the job into important steps.	3. Explain the key points or behaviors. (Write out the key points for the trainees, if possible.)
2. Prepare the necessary equipment, materials, and supplies.	4. Show the trainees how to do it again.
3. Decide how much time you will devote to OJT and when you expect the employees to be competent in skill areas.	5. Have the trainees do one or more single parts of the task and praise them for correct reproduction (optional).
Actual Instruction	
1. Tell the trainees the objective of the task and ask them to watch you demonstrate it.	6. Have the trainees do the entire task and praise them for correct reproduction.
2. Show the trainees how to do it without saying anything.	7. If mistakes are made, have the trainees practice until accurate reproduction is achieved.
	8. Praise the trainees for their success in learning the task.



Applied okay in many cases now if you look at on the job training, so what actually happens first of all you have to break down the job into important steps okay you have to prepare the necessary equipment, materials and another things and then you have to see that how much time on you will be able to divert on the job training and when you expect the employee to be competent in the job so starting with the first stage to the last stage, you do not need to make all the stage, so that the information is effective, and then after preparation you need to go for actually instructing the individual that how to perform the job.

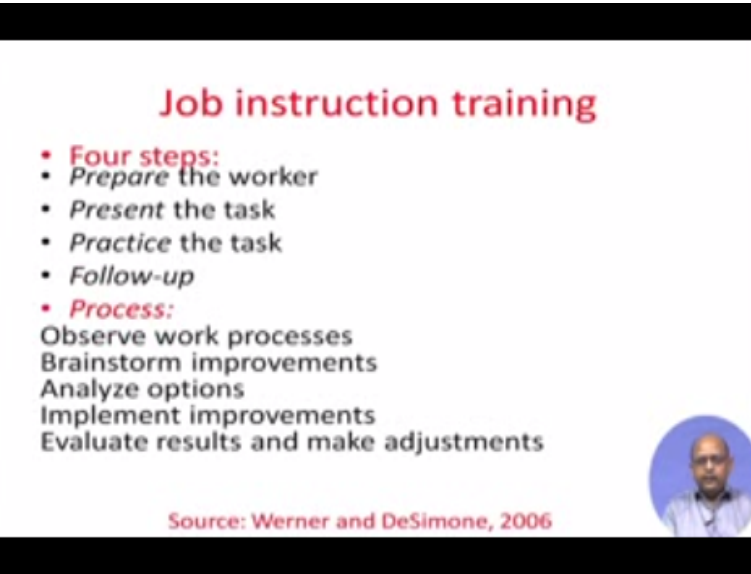
So you tell them the objective of the tasks and the you allow him to see that how this has been done right suppose there is a belt or machine and you want him to learn that how you are going to use this machine to produce certain things so first of all what you do yourself are going to demonstrate this is how the job is to be done okay, and then in the process he becomes an observer, okay, he is going to not few point or the behaviors that is important and then again you telling that as you see this is how it is to be done then you ask him to do.

It step by step and see that which step he has made mistakes and then once he has learn all the steps did you ask him to complete the entire steps in one go okay so you allow the trainee to complete the entire the task and if they are done well you must appreciate it okay if he makes mistake do not scold him right you tell that okay this is what is the mistake you need to practice okay unless you are able to do it perfectly okay so the idea is that if it is able to do it effectively apprise it, telling okay very good.

Well but if he is not able to read do not scold it you give him time and space and allow him to re learn it so when him tell okay this is to be done and ask him to do it so that he is able to learn it, okay so the idea is on the job training is to make him learn how to perform a job effectively while doing his job actually right.

So this is the most important, in understating certain risk is that how the job the job is to be performed right in most of the technical training it is very important when it comes to the skills technical training and that is you the technical training on the job is very important right.


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Job instruction training

- **Four steps:**
 - *Prepare* the worker
 - *Present* the task
 - *Practice* the task
 - *Follow-up*
- **Process:**
 - Observe work processes
 - Brainstorm improvements
 - Analyze options
 - Implement improvements
 - Evaluate results and make adjustments

Source: Werner and DeSimone, 2006



Now will discuss on the job training where you are giving instruction to the people about how to perform the job including certain steps. I told you like the first is stage is that you need to make work ready to learn certain things so make sure the person or the trainee or the participant who is going to learn the is fully ready physically and mentally and he has right kind of learning attitude okay to start learning, if you start prepare well probably it is not going to help the learner to learn so the idea is that make sure that he needs to identify and he is prepared well to take up the job, right then at the next stage what you are going to do.

You are going to project the task means that you are going to see that is okay this is task that you are going to learn its specify the task that is to be learn, and you also see that why this task is to be done so that he understand the importance of the task and the third thing is that how the task is going to be contribute, to performance so there are three thing that is important, for him to

prepare well, and to take up the job, is that you tell about the characteristic of the job, right so once this is done then you are actually ready and then you go for presenting the task so once the task is presented then you allow him to practice the task, okay.

So when you are going to presenting the task, you giving the importance, and then you go for a demo, that okay this is how the things are to be done and actually you practice and do it as a attended, for example suppose you are going to learn driving okay. So if I give you the lecture okay these are the things that is to be done and these the handle this is say clutch, this is a one thing and this is another things.

And this is how it is to be used when you are going to be drive a car, this is the break this is clutch this is the speed, this is the handle and this is how it is to be done, probably you not able to learn so when you are going to be learn driving the best ways is to learn it, on the job so what you do you sit beside that driver and he is going to teach.

You this is the how you are going to do it, okay and these are the difference task you have to carry out, in order to drive it effectively, so you carry out each of these task he is sitting with you, so see demonstrates then you practice and while practicing if I making certain mistakes then he is tell you know this is not the way to do it, this is it is to be done, okay again you take a driver seat, so for each and every activity that is related to driving is not only known to him but he must practice it, in order to become perfect, otherwise.

What will happen, he will not be able to drive, and he would put people at risks, so all kind of things may be there. So this is the best example that I can give you this and then you follow it up regularly, this is how have been improved. As gradually as genuine you practice this job. What actually happens? You become perfect. And then you do not like a mistakes, you follow correctly as given in the practice book and then you are able to perform the job as an when it is required.

So the process says that you observe the process while it has being demonstrated you discuss it within that what is this, how it has to be done group 5 then analysis various options what else is needs to be done. This is the problem. What I can do, suppose you know that okay. You are not able to control certain things then what are the options that I have.

So you should be able to identify that and finally you should be able to improvement yourself on any task that is given to you to perform. So that you are able to do it well and there ultimately you evaluate the result and gradually you make adjustments to become of the job. So these are the steps and processes on the job training.

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Job Rotation

- Train on different tasks/positions
- Often used to train entry-level managers
- Also used to provide back-up in production positions

Example: In Banks, employees rotate their jobs between different process areas so that at the end of the program they can perform in all of the five areas like cash collection, draft, loan, foreign exchange, enquiry section.

Source: Werner and DeSimone, 2006

Another important method is job rotation. Job rotation is something that is actually is done that you are going to use the same set of knowledge and skill to perform different kind of job and different context, but the level of knowledge and skill that is required in a job rotation is same. Job rotation training is given people so that you become multi tasks. So you can perform different types of task using the same set of knowledge and a skill base.

Now if you look at job rotation as such, you will find that you are going to be trained on different task, different activities, different positions, especially at entry level managers can be done. So that they become multi task skills and it also helps to back up, for example in a production department somebody is not there, so you also know how to do it.

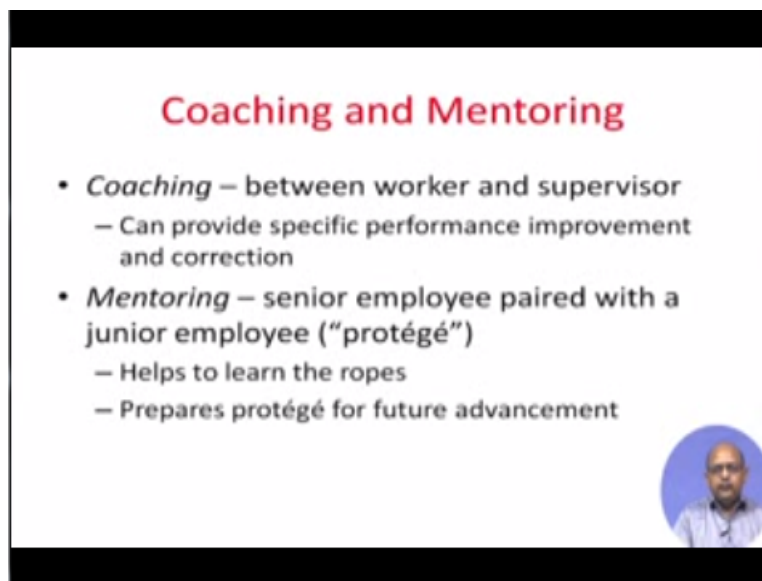
So you can provide a back up to that person. And you know that many places you will find that this job rotation is run a regular basis and this actually helps you to create more challenge meaningful sometimes in order to even a what you call monotony or these kind of boring this, you take up these kind of things so that people are going to perform different type of task using the same set of knowledge and skill base. For example, in bank you have seen that people have

been rotate to different jobs somebody is sitting in the ATM counters and may be in the draft counter.

May be in the finances counter or could with go to their loan counter or the cash counters, so the same person is being rotated to different jobs. What actually happens in the process, he learns everything?

So suppose on particular one person is not available and you are there, so you could be shifted to that job. Right at there of people and that need to be solved. So job rotation is very important in the sense that is really helps you to learn different kind of activities or task that you should perform, but the only drawback is that you are going to use the same set of knowledge and skill base to perform that job. Here you do not learn or upgrade your knowledge and skill base. But you are able to apply the same knowledge and skill to perform different kind of activities.

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Coaching and Mentoring

- *Coaching* – between worker and supervisor
 - Can provide specific performance improvement and correction
- *Mentoring* – senior employee paired with a junior employee (“protégé”)
 - Helps to learn the ropes
 - Prepares protégé for future advancement

Moving from job rotation, we are going to talk about another important concern that is coaching and mentoring, though we will discuss it in detail about coaching and mentoring as separate or topics. But that is also a part of what you call on the job training, because coaching what actually happens you are going to coach the person on how to do certain things and mentoring again it is one to one, where a senior person is going to help you or a junior person to help to see that how his growth and development takes place.

So if you look at coaching and mentoring that is very important in the sense that this is worker and the supervisor. And supervisor going to coach him. So he is going to ensure that okay you have specific performance improvement and you are able to correct your mistakes and that is where the coaching takes place.

The best example that I can give suppose there is a team, football team and there is a coach and he is going to train people and how to do certain activities. So you know that as a part of the game you are going to perform different activities while playing it effectively. So he is going to tell you that how you are going to coordinate, how you are going to hold the ball. How you are going to throw it and actually he is going to perform these kinds of activities. And then he asks you to do it.

And then he is where you are able to improve your performance or not and if you are not doing it properly if they are certain mistakes then he tells you that no there is not the way to do it. So these are all going to hold the ball, these are all going to throw it. These are all going to use your legs, these are all going to use your head and you have to see that you are not going to make mistakes in the process. So all these things have to teach by the coach to the players.

So that is specific improvement in the performance and they are not going to make any mistakes. So coaching it could be a one to one or it could be one to groups and that is what we call team coaching but anyway we are going discuss about coaching in detail.

So another important thing is mentoring. Mentoring also we are going to discuss in detail and the next week sometime, but here what I want to give an idea what mentoring is. Mentoring is someone something that is where a person is known as mentor and who is the senior employ and then you also have a mentoring and this mentoring is a junior employee. So you are going to talk them together with each other, the idea is that the senior employ is going to help them to learn the tricks of the game, the ropes that how he can go for his personal and professional growth and development.

So he is going to prepare the protégé. Protégé is the person who is to learn that is the junior employ of the training or the menty. These are the different terms that could be used for the protégé. So the idea is that the senior employer or the mentor is going to prepare the menty by telling him what was the things that need to be done and in the process he is also keeps the line

management and the job. Sometimes their senior managers could be your immediate boss could be your mentor, sometimes it is a some senior manager from other department who is very experienced and knowledgeable.

He could be your mentor organizations have more structure mentor program what you call a formal mentoring program they also go for what you call informal mentoring program. So both kinds of mentoring programs organized by the organizations and informal mentoring what happens, you decide and select your mentor and formal mentor organization the sites you are going to be appeared with mentor who is going to help you to see, that personally and professionally grow up. So mentoring and coaching is also on the job training and we are going to discuss it in detail in next two weeks and that is why I am not going to size it much here.

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	Advantages	Disadvantages
Self directed learning – employees take responsibility for all aspects of learning including when it is conducted and who will be involved.	<ul style="list-style-type: none">↳ Allows trainees to learn at their own pace and receive feedback about the learning performance.↳ Requires fewer trainers, reduces costs associated with travel and meeting rooms, and makes multiple-site training more realistic.↳ Provides consistent training content.↳ Makes it easier for shift employees to gain access to training materials.	<ul style="list-style-type: none">↳ Trainees must be motivated to learn on their own.↳ Higher development costs.↳ Development time is longer.

Next is self paced or what we call self directed learning. Self directed learning something that is new where employ take the responsibility for everything that is related to learning. So they get the content and then that is add how they are going to learn, when they are going to learn, who is going to be involved in the process and these kind of things.

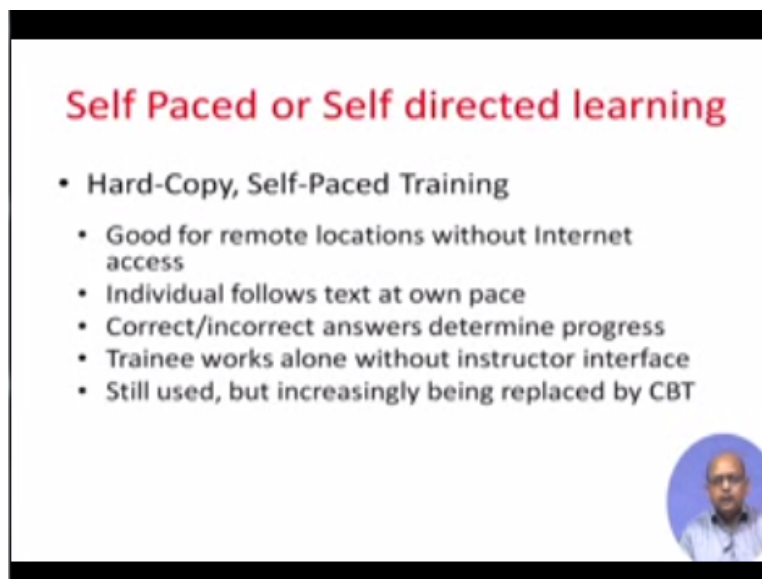
It means you are going to learn any time anywhere any place, it could be virtual, it could be physical whatever it is, but the idea is that you take the responsibility and you decide when and how you are going to learn it.

So the advantage of self pace or self directed learning is that you are going to learn at your own pace and get feedback, then it does not take as much trainers you can take and fill with the computers and the cost is very less, because you do not need to travel or there is no cost associated with other kind of things and prospective resources, what you require is the training material that is to be learn and how you are going to provide feedback.

And then you do not need to self employ from on paced to another place to see because their own placed they cannot get it, but certain this advantage is that sometimes more trainees are not motivated to learn on their own unless they are forced to learn. Sometimes the development cost is very high.


For example, this NPTEL courses are self directed where you are going to learn on their own, but here certain have been added like you if you learn it well, you perform well, you get a certificate. So it can be modified at that cost, but still development cost is very high. But once it is developed the other cost become very less, it is reduced significantly. So self directed learning is very good and now days.

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Self Paced or Self directed learning

- **Hard-Copy, Self-Paced Training**
 - Good for remote locations without Internet access
 - Individual follows text at own pace
 - Correct/incorrect answers determine progress
 - Trainee works alone without instructor interface
 - Still used, but increasingly being replaced by CBT



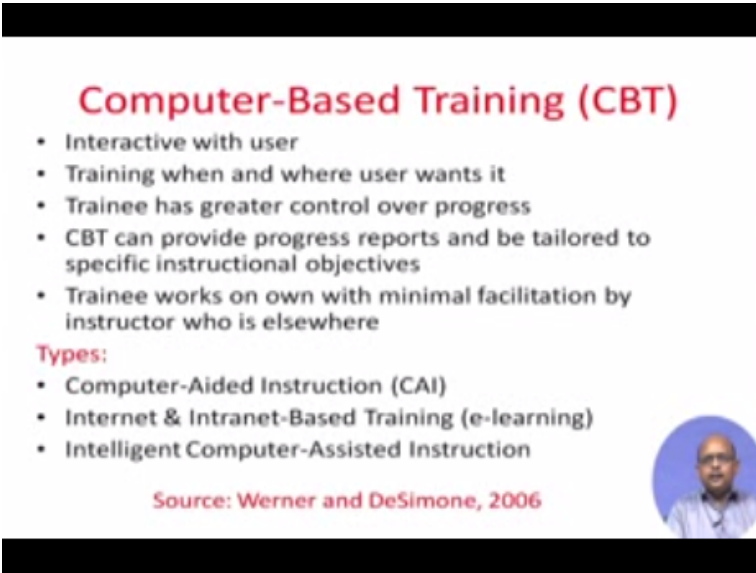
That multimedia and learning is also used here. So either you have a hard copy where you give them certain instructions you tell okay this is what you have to learn, this is what you have to learn remember and then you come back and still whether you have learnt it or not. It can be done where you do not have internet actions, but if you have internet actions you can go for

computer based instructions or computer based training programs the idea of skill paced training is that you are going to follow it at your own pace, whether it is computer based or text based.

Then the extent to which you have been able to learn is going to design your progress, suppose it is on certain modules so Unless you are able to learn module one, you will not be able to move to module 2, so at every stage you get feedback and accordingly you proceed further in your learning process. And this is not much interface from the instructors the moderators may be there and sometimes that is going to see this is your feedback, this is what you should have done. In addition to do that there is not much feed back or interface with the instructors or the moderators.

Now the self paced or text based learning has been replaced by the computers and that is why we have more computer based training.

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Computer-Based Training (CBT)

- Interactive with user
- Training when and where user wants it
- Trainee has greater control over progress
- CBT can provide progress reports and be tailored to specific instructional objectives
- Trainee works on own with minimal facilitation by instructor who is elsewhere

Types:

- Computer-Aided Instruction (CAI)
- Internet & Intranet-Based Training (e-learning)
- Intelligent Computer-Assisted Instruction

Source: Werner and DeSimone, 2006

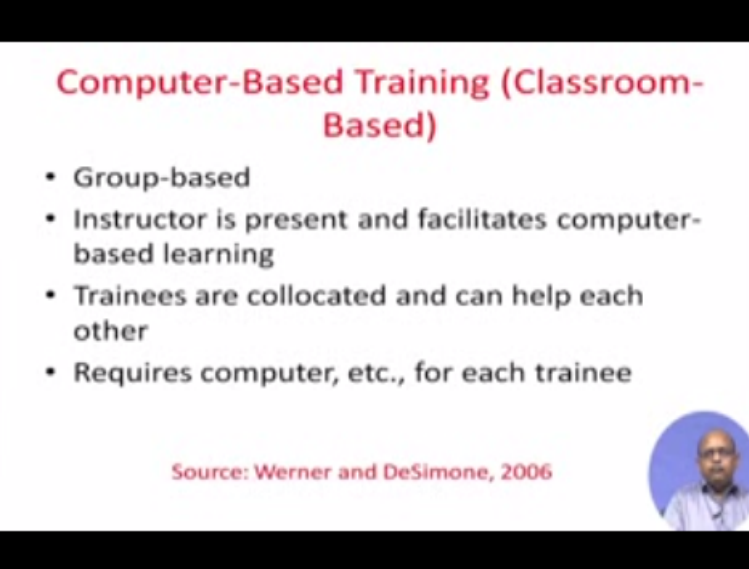


Which is very popular, you know that lot of languages relate to programming is being learn through this computer based training. It is more interactive training when and where you use wants it. For example, lots of online courses have come up today where you are going to learn at your own pace. You have more control over the progress so you can decide when and how you are going to learn these things, but definitely you have a broad time frame within which you have to learn and it also provides the progress.

So after each module you know that how much you have learnt and then the certain specific objective that you have to meet at each module and if you have cleared that module only then you will be a while allow to move to the next level of learning. So you will work at your own with not much facilitation by the instructors whom might be sitting somewhere else.

And then this training is offer to number of people provided they have internet and computers it could be done and there lot of variations like you have computer had any instructions then you have e-learning then you have intelligence computer assisted instructions that are very popular these stage.


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Computer-Based Training (Classroom-Based)

- Group-based
- Instructor is present and facilitates computer-based learning
- Trainees are collocated and can help each other
- Requires computer, etc., for each trainee

Source: Werner and DeSimone, 2006



So what you are going discuss now is computer based instructions training or instruction, it could be class room based or it could be virtual also both cases. So when you are talking about computer based training it could be given in a group. For example, sometimes we are teaching certain statistical programs then how to run it.

So everybody sitting on the terminal connected with the internet and then the teacher tell them this is how we are going to do it and you also do it, so you are going to do it, so it could be group based where you are going to learn certain processes and instruction is present, instructor is present here.

He facilitates computer based learning, he has to telling that these are you are going to do it. so perform the next action you do it on your computer and check whether it is correct or not. Suppose you are going to write a computer program in a particular language. So instructor is there you are also sitting on the front of the computer, you writing the code for the program and he is telling okay. This is all you have to go. See whether it is correct or not and gradually you proceed to say whether you are code is correct or not, and then you get feedback from the instructor whether you have done it in a proper way or not.

This is class based computer training where, but you require is nothing else, but computers and internet which is connected with the computer for each training if you are having a class room. Now you know that computers have been replaced by tabs, mobiles.

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Computer-Aided Instruction (CAI)

- Drill-and-practice approach
- Read-only presentation of a “classic” training program
- Multimedia courses
- Interactive multimedia training
- Simulations

Source: Werner and DeSimone, 2006



And these kind of things. So even that can be used without much from instructors. So another variation of computer based instruction is computer added instructions where you do not have a

facilitate or instructor, the computer itself is going to provide you certain instructions that what is to proceed. So you practice and then he is going to tell you and then again you correct yourself then he is going to tell you at each and every step, you feed back which is already actually input it, the feedback it already a part of the system.

So that you do not require a facilitator or instructor for doing these kind of job. Then lot of multimedia courses that is being offered more effectively MIT ,IT so these multimedia courses very popular and that is why you are going to learn at your own base at your time and when how you going to do it okay, so these are the best example I can give out computer instructions then you have more interactive multimedia learning it is not one-way communication it is two way communication that you ask questions using a video conferring and then you are going to answer the questions participle filed will be actually able to interact with the instructors .

Whose is sitting somewhere else at the same time he is going to interact with the set of trainers okay, and so it is if you have these kind of facilities is really good and you will able to track with the set of people who wants I related to stimulated also okay, for example these would be probable question and these how their going to ask so you prepare them later on so as the relate comes out okay, this is the answer this is how to go out it and you can also give feed back in that way right.

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Advantages of CAI

- Interactive with each student
- Student is self-paced
- Logistics –
 - Increasingly available over the Internet (or via an organization's intranet)
 - Updates are easily distributed
- Instructional Management & Reporting

Source: Werner and DeSimone, 2006



What is the computer add instruction is that you going to interactive each student any student in the class can ask question if they answered out okay, through this video conference is our telling conferencing about providing both of them connected to internet you are going to learn it at your phrase or sometimes the interactive is not present so you can post the question is answer the questions either in a virtual mode or otherwise also okay.

Sometimes you know that well you are not able to be physically present then you use blocks forums these kinds of things interact with the people they can post the questions you can answer these question and that is how interaction takes place in the most courses okay, the learning here is selfish increase you are going to motivated NF to learn on own and that is the most important things but it is logistics like internet and you have to see that it is going to be distributed the courses are been distribute.


And you know that most of these courses and now this been offered in this normal course is to impartial or uploaded in you tube that you can go through it and then the discussion forms available through which you can ask questions so this is the best spend computer added instructions that is being done okay, and then able to manage instructions and reporting how will it is going on right and it is very.

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E-learning

- **Intranet**
 - Internal to site/organization
- **Internet**
 - General communications
 - Online reference
 - Needs assessment, administration, testing
 - Distribution of CBT
 - Delivery of multimedia

Source: Werner and DeSimone, 2006



Cost effective development caused is going to very high nest is E- learning, basically nothing else but whether we use internet to assist you in loving process and this internet basically help to


better communicate you can provide online things references are inactivated you can assist a need test and evaluate the people how well they doing okay, and you can come distribute this computer based training, so that they do not require the class room. People having computer at the home and having internet facilities can see this multimedia course online right. So these are the benefits of e learning.

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Intelligent CAI

- Uses computer's capabilities to provide tailored instruction
- Can use expert systems, fuzzy logic, and other rubrics
- Can provide real-time simulation and stimulation

Source: Werner and DeSimone, 2006




And then intelligent CAI, why we have used this word in computer instruction is, that you are using certain programmers, advance programming artificial intelligence or machine learning, and then you make computers wide instruction to the people as when it is required. And also interact with people to tell him or to give feedback what is to be done and how it is to be done. you basically the role of artificial intelligence and machine learning, this kind of technology is to be used in this kind of profession to ensure that computers are able to help you to gives you direction give you feedback to tell how are you doing.

And then if you have certain questions they would be able to answers those questions and the data as to be said, the computers are going to be more component to perform their job more effectively. So you are using things like expert system is fuzzy logic and other kind of programming and it can when provide real life simulation and stimulation to the people who are to learn certain things.

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Implementing Training

- Depends on:
 - Objectives
 - Resources
 - Trainee characteristics
- **Other considerations:**
 - Physical environment: Seating, Comfort level, Physical distractions



Then now we have discussed to the different kind of method which are basically related to three categories if you remember, that is on the job training, class room training and experiential learning. So once you know about these methods their drawbacks, their advantage and disadvantage and which context is to be used then ultimately go for implementing the training and decision about a particular method that is to be applied or used in delivering the content depends upon the objective of the program.

What are the resources that is available what kind of trainings you have, what are their needs, expectations, their attitude and behavior and some other consideration that you need to look at is whether you have the environment sitting comfort level physical distractions and depending upon what they are going to learn you decide about to particular method that is to used for delivering the content in a training program.

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Choosing a Training Method

- Identify the type of learning outcome that you want training to influence.
- Consider the extent to which the learning method facilitates learning and transfer of training.
- Evaluate the costs related to development and use of the method.

Source: Werner and DeSimone, 2006



So ultimately you are going to select a particular method, so once we have been able to identify the particular method. So you make sure that in what way it is going to help people to learn that is more important and see that the extent to which this method is going to facilitate learning and transfer training.

So selection of method depends upon whether people will be able to learn and apply that on the job or not and accordingly you decide about the training method and you also look at the cost that is related to development into use of the method, because why did you have resources you can go for method methods you do not have resources and development cost is very high.

Then you can avoid those kinds of methods, so their certain constancy which does not allow you to go for the best method in that case you can use the appropriate method which will help you to learn in a better way. Thank you very much.