Training and Development
Prof. S. Srinivasan
Vinod Gupta School of Management
Indian Institute of Technology, Kharagpur

Module – 06: Training Evaluation Lecture - 26 Defining Evaluation

Welcome to lecture number 26 and this is this next module which is module number 6 and this is the 1st lecture of this module. In the previous module we learnt about you know program designing the training designing. Now, we are getting into the important module which we are going to talk about the evaluation; how do you evaluate the training program.

So, when we talk about an evaluation it is are we going to evaluate the training program only about the outcome means essentially we are talking about a transfer of training or what are we going to evaluate; are we going to evaluate on the content or how the training program itself is been designed or were they are able to identify. So, the evaluation is very important component for two purposes we are going to see in the whole module.

But, if you on the basis to give a basic introduction see evaluation is important for two perspective; one is about how critical the training program is for the organisation and one perspective if you look at are we approaching a right direction in designing a training program. Then why evaluation is important? It is going to suggest whether the training program has been effectively conducted and it is able to create the desired result what an organisation was expecting.

And it will also give scope for further improvement in any training program may come up with some shortcomings or maybe some participants could have not you know able to learn what we are intended to create this evaluation will suggest and give indication to an organisation ok.

Where do you improve upon where is this scope for improvement is it on the training content or is it from the who is going to deliver the training program or is it on the way method of conducting a training program or probably may be attributed towards the resources being shared or a materials been given or probably even the venue itself or

may be the ability to understand was challenging. So, any pre course materials are required all these will be an outcome through an evaluation.

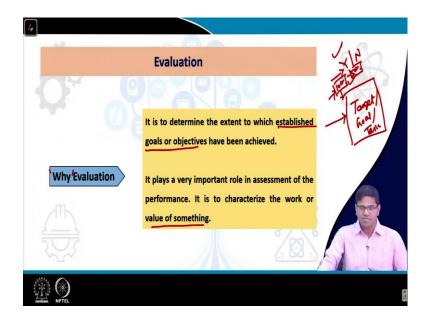
So, in today's lecture what we are going to do is we are going to understand the component of evaluation, what is evaluation and we will learn about you know the types and principles of evaluations. In today's lecture we are going to understand the evaluation in a very generic concept and in the subsequent lectures we will relate it with a specifically on a training program evaluation.

(Refer Slide Time: 02:31)



So, that we will start with the larger understanding about what is evaluation, why evaluation, what are the basic features and principles then we will get into the actually evaluating a training program ok.

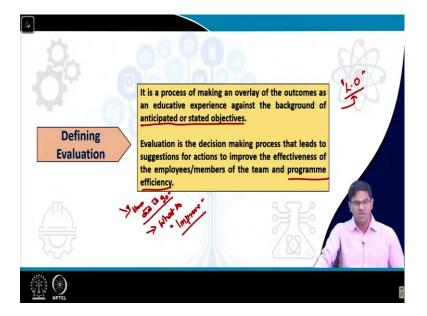
(Refer Slide Time: 02:43)



So, let us get into the lecture. So, when we talk about evaluations the always we will always start with the question of why evaluation for any topic we always ask with the question why. Why are we evaluating? So, this evaluation is you know important to determine the extent which the established goal means whatever the goal we had have been achieved or not because we always start with you know evaluation ok. So, we already have a target or a goal target or a goal or maybe you can even call a task or whatever it is in this place.

Now, after this did we able to achieve it or not that is why evaluation is important unless otherwise you do not conduct an evaluations you will never know did we achieve it. If yes let us say yes no even if we achieve how far we achieve; is it a 100 percent or is it 50 percent or even if it is a 100 percent was it successfully translated. So, there are so many which is also important during the evaluations. So, why it is also plays a very important role in assessment of the performance.

We are going to understand the performance of any program or any project you take for the evaluation as a general concept. It is very important to understand the performance how good the training program delivered, how good the project have been carried out. So, it is also to characterize the work or the value something which may be related to a project or may be a training. (Refer Slide Time: 04:02)



Now, let us try to you know define evaluation. So, it is always a process which are making an overlay of the outcome as an educative experience against what? Against an anticipated or a stated objective. It is always about you know against the expected outcomes. What are we expecting out of this particular project or what are we expecting out of the particular training programme. And I have you know we will also have a learning objectives if you remember yes learning objective you would have already done.

So, does the training programme or whatever the programme which is been planned does it been successful in realizing this learning objective? An evaluation is a decision-making process because that leads to you know suggestions for actions to improve the effectiveness of the employee or a member of a team or a programme efficiency.

It is always you know as I said yes the evaluation has you know also talks about how did it go how did it go and it also gives information about what to improve. That is why the evaluation has you know these key important aspects.

You know how did it go, how well it was done, how well it was able to deliver and is there a way that what can be improved so that we will be able to continue to achieve what we really intended to achieve. (Refer Slide Time: 05:21)



So, let us understand the definition of an evaluation. Evaluation is a process it is a continuous process, it's not a onetime event as against what we always perceive. Evaluation in the sense students who take an examination who is a part you know who are already a student in an educational programs the moment we say evaluations either we think of an end semester or probably a mid semester.

But, if you look at even in an organisation when the moment we say evaluation if we can relate some a compound amount of evaluation happens in a workplace where we say a performance evaluations either it may be a quarterly or you know biannually 6 months every 6 months or you once in a year you will be evaluated. So, we always think it is a one-time activity it is not the case, evaluation is a continuous process.

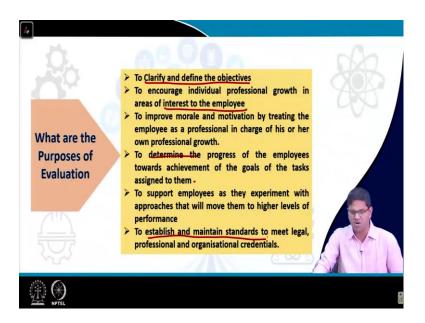
Why it is a continuous process? In any setup you know this is the you know path. So, the path is continuously trying to go when you evaluate at the end let us say this is the actual path and you found that you know there is a deviation and if you evaluate at the end what will happen you know the deviation is so high, but if you are a continuously evaluating you could have arrested it when the deviation is shorter right that is how evaluation it is continuous process which critically examine a program or an event or an any training programs it is what it is involves.

It involves collecting, analyzing the information about program activities, characteristics and an outcome. So, when you collect an information. So, how do I evaluate the

deviations? You need to collect information to find out these deviations I cannot just simply observe and see there is a deviation. I should collect sufficient information so as to understand what is the deviation which is happening or is it actually travelling on the same path which I have intended to do so.

So, so that you know if it is a case of you know this is let us say is a case 2 and this is a case 1. If it is a case 2 then we are wanted to repeat or call it a replicate a same way of conducting a delivering a program because it goes as planned. If it is a case 1, what is it talking about? That is where talking about how to improve so that it goes from 1 to 2 which we are interested to develop ok.

(Refer Slide Time: 07:40)



So, now, let us understand what are the purpose of the evaluations. So, the evaluation always helps to clarify and define the objectives it helps them to understand whether the stated objectives are we met. Or in case if there are some deficiency or maybe the deviations you need to clarify or define the objectives clearly so that the program or the training program able to achieve the objectives.

And to encourage individuals' professional growth in the areas of interest to the employee a people enrol for a specific training program based on their own interest to inculcate a new skill or improve their existing knowledge level and also to improve morale and motivation by treating employee as a professional in charge of his or her own professional career.

The evaluation will help them to know where do they stand and when they are really scoring well, when they are really doing well there is a motivations and if they are not doing well there is an opportunity for them to improve upon. And also to determine the progress of an employee towards the achievement of the goal or a task assigned to them.

It is important that they as an employee you should know are you actually learning it or are you able to progressing towards the goal or a task assigned to you. The evaluation is one important component which will tell you yes you are progressing on the same page towards a set target or a direction which is very important that is why evaluation is important.

And to support employees as they experiment with the different approaches. We always know that you know employee approach multiple ways to do task, assign or even the learning process we talk about. Yes we have to you know support employees through the evaluation and understand where is the you know where they are really good and where they lack and that provides an information to them to adjust themselves or correct themselves and improve upon.

And to establish and maintain a standard to meet a professional or an organisational credentials. So, the evaluation will tell us what are we what are the shortcomings out of the any training program we go through or any instances in an organisation. It will tell you what are the standard so that you will be able to meet the expectations or go in alignment with where or which is your organisational credentials or what is the expectation at the organisation level ok.

(Refer Slide Time: 09:52)



So, again next understand the what are the basic features of an evaluations. Evaluation is a continuous process I as I explained in the beginning yes it is not a one-time event it is a continuous process. It then it might happen in the beginning of the program trying to understand what level the employee is and the middle of the program do an evaluation to see what is the you know a growth or a progression they make and end of the program then see the progression what they made and similarly the outcome related also have to be done. So, its continuous process.

So, evaluation is a procedure for improving it can be a product or a service or the performance of the we can also call a performance it is aimed at to improving a product, service or a performance of the employee. And evaluation is a compound objective observations and evaluation are also valuable and indispensable for policies and further actions. Why?

Because unless otherwise you do not evaluate you will not be able to you know establish what is the standard one has to follow. Or and also how what should be the remedial action one has to take through a policy level or maybe some inputs or you know conducting a repetition of the training program or maybe making adjustment on the training program.

So, it is very important for the organisational policy and further actions. An evaluation must be a form you know must be an integral part of an operation. So, every organisation

should have to integrate evaluations you will be always seeing that yes in any even a small activity, small program you do you have to the have the evaluation part of the training program or part of the even a smaller events so that you know how a well the event or a program has been organized. In two ways one is about how well the delivery of the program happened and how well the learner able to learn.

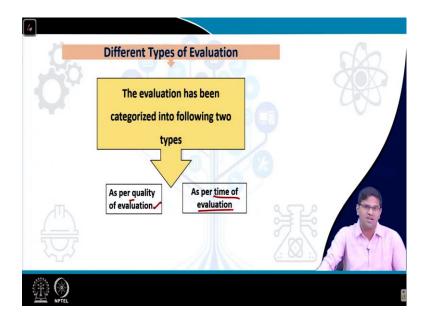
So, this is having to be always a part of in any operational a events in an organisational set up. And it is a systematic process it has to follow a very systematic way of evaluating and you know standardized procedure to be followed so that you know there is no you know deviations happening when they you know measure or evaluate particular program no biases in the evaluations, it should be a very systematic process.

An evaluation helps in redefining the instructional objective on the basis of the feedback because in the evaluation when you do we will have a feedback; feedback will talk about what were the good points what were not so good, where there is a potential to improvement or probably what they really like, what they you know dislikes likes and dislikes about the programs.

So, likes should be encouraged and dislikes should be you know reduced that is the intention of getting the feedback about any training program. An evaluation should have a reliability and validity. So, whether the method of evaluations or an instrument using for the evaluation is reliable and also valid it is trying to measure what it intends to measure that should be the important of an evaluation comment.

This is one of the basic principles of coming with the any evaluation technique or a method or a tool. The tool has to be reliable; it should be consistent and it also to have a validity. It is measuring what it intends to measure it is actually evaluating the right aspect of what we are interested in evaluating ok.

(Refer Slide Time: 13:05)



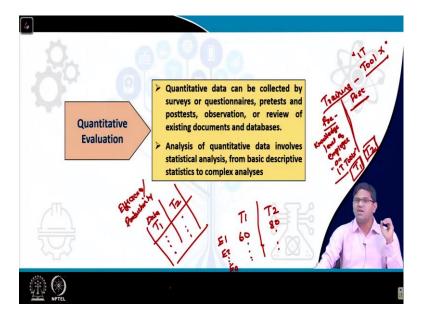
Now, we will see different types of evaluation. So, evaluations are broadly categorized into two things; one is as per the quality and another as per the time of evaluation. So, when do you evaluate based on the time of evaluation and also based on the quality a perspective the evaluations are classified.

(Refer Slide Time: 13:28)



Let us look at what is as per the quality evaluations. So, as the as per quality of evaluation there are two things one is about quantitative and qualitative evaluations ok. Let us try and understand what is this quantitative evaluation ok.

(Refer Slide Time: 13:41)



So, the quantitative evaluation is done through collecting a data either through a survey or a questionnaire and what you have to do you know you need to pre test the tool or an instrument or the survey you are going to use you know before the training program, after the training program, observations, review of the existing documents and databases.

And what will you do out of this collection of the information or a data through a survey or a questionnaire you need to analyse the data which is you know using certain statistical analysis and you will run through some understanding the basic descriptive statistics to analyse the aspect of the training program.

For example, let us say we are conducting a training program ok. This is pre post let us say this training programme is on a specific tool let us say IT tool IT tool X. Now, what I am doing I am measuring the knowledge level of employees on the IT tool X this is before training. Now, I am trying you know try this same survey or a same instrument which I am giving to them to measure post the training program. Now, I will have the score let us say at T 1 I have a score and at T 2 also I will have a score.

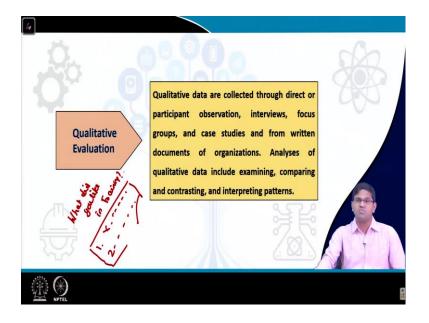
Now, I am trying to compare these two scores and see whether there is a significant difference in the knowledge level of employees on the IT tool X which were done through the training program. So, yeah I will have some score in T 1 and T 2 let us say this is 60 and this is 60. I will collect from all employees so this is for employee 1 I will have to employee 2 then to employee n.

So, I will have all scores now I can do a statistical analysis to see whether is there a significant difference between the two periods which is prior to a training program, after the training program is it significantly improving the training program. So, this is how you know I am quantitatively evaluating the training program and also I can also see efficiency employee efficiency or probably a productivity data.

So, I have a data on productivity of employees same similarly T 1 before the training program after T 2 in the workplace. Now, these two scores are there with these two scores I can do a statistical analysis and then find out is there a significant difference after the training program is been conducted that is how what we are called as a quantitatively evaluating.

And also we can also see the scores on the trainer how good the trainer is, where they able to know impart the knowledge, where they are so good in you know handling the resources. So, on all other ways the quantitatively it can be assessed and evaluated ok.

(Refer Slide Time: 16:38)

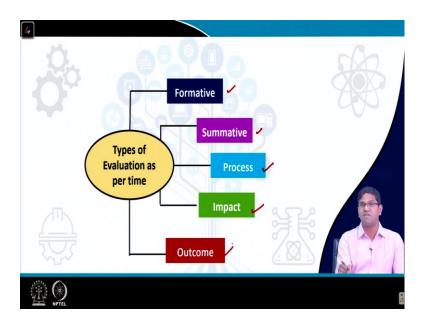


Now, coming to the qualitative aspect of it, see the qualitative data are essentially done through a talking to the observants or the participants, interviews or a focus group or even a case studies or written documents of the organizations. And you will also analyse the quality data and trying to understand how well the employees or a participants have

written for example; participants have asked you the questions what did you what did you like what did you like in the training ok.

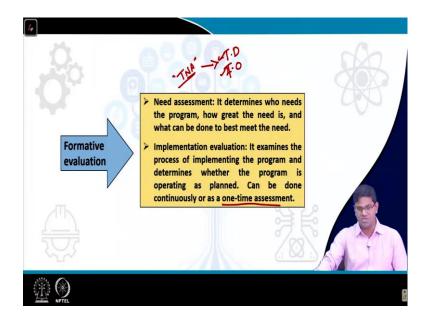
So, now employees would have written x y all these 1 or 2 paragraphs would have been written. Similarly, what they did not really like what they are want to be improved upon. So, all these qualitatively you collected information, you conducted an interview or through some documents which are available feedback papers have been distributed, service have been distributed all that information qualitative information has to be analysed and trying to understand this is on based on the quality perspective.

(Refer Slide Time: 17:28)



Now, we are going to talk about as per the time, the type of evaluation as per the time. So, they are of different five types as per the time one is a formative evaluations. We are going to see each one of it what it is actually. Formative then summative evaluation, process evaluation, impact evaluation and outcome evaluation. These are the five different types as per the time of the evaluations.

(Refer Slide Time: 18:01)

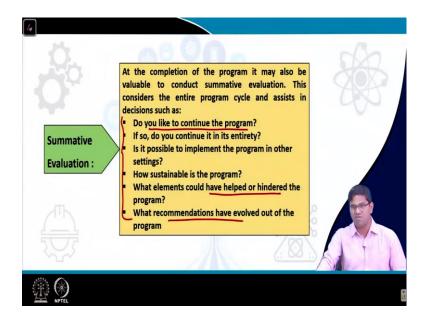


Now, let us see what is this formative evaluations? The formative evaluation talks about you know during the formation of the training programs it is about you know trying to understand about training need assessment if you all recollect during the particular module. This act as a precursor to design the training program, training design and also setting the objectives of the training objectives can be set only through the training need assessment.

So, it is about to determine so how well the evaluation training need assessment conducted to in determining who needs the training program, how good the training program is, what can be done to best meet the need of the training program which is about in the formation stage of the training program.

And you know implementation evaluations it examines the process of implementing the program, determines whether the program is operating as planned. Can be done continuously or as a one-time assessment which is you know formative evaluation.

(Refer Slide Time: 18:51)



Next comes the summative evaluations. What are the summative evaluations? It is kind of you know after the completion of the program it maybe you know also valuable to conduct a summative evaluations. What does it consider? It considers the entire program cycle assist in decisions such as what do you like to continue the program.

So, after you complete the training program you are trying to holistically trying to evaluate the training program and see what it will help when you do the summative evaluations after the completion of the training program. You will get some input on do you like to continue the program is the program been really received well by the participant and this program is really good delivered very well so do you want to continue this can be addressed through this evaluation.

And next is so though if so do you continue it in entirely or maybe some sections of the training may be dropped which was not so relevant participants are not happy that having the particular part of the training program in this whole training program then can we use entirely or maybe some sections can be modified. And is it possible to implement the program in other setting. Can we see the same set of training program can be replicated elsewhere in a different context or a different situations or maybe for a different set of employees?

Now, I have delivered a training program for entry level employees, now I wanted to deliver it to employees in a manager level or a senior management level can I replicate

the same training program. And how sustainable is the program? Can the program be sustained if I can implement this training program?

And what elements could have helped or hindered the program? This will also hint about what would have you know given a best performance or what would have hindered the program. And what is what are the recommendations that are evolved out of the programs? So, through this summative evaluation at the completion of the program you will be able to get insights on all these decision related questions through this summative evaluation.

(Refer Slide Time: 20:41)



Then comes the process evaluations there are you know different aspects to know such as you know it is under the process of conducting or delivering a program or a training programs. As the project reach the target group whether the participants able to receive it well or all the project activities reaching all parts of the target group where we are talking about the whole of the project you may be relating to a training project or can be in any instances you have to see whether all parts were able to reached to all the participants or the target group we are referring to ok.

Then are participants and other key stakeholders satisfied with the aspects of the training program? Who were involved in the training process are they been satisfied about the how the project has been delivered conducted. Are all activities being implemented as intended? If not why?.

And trying to understand whether everything has been implemented where it is all been planned is it when did it go as per the schedule, did the materials been effectively used, did the resources were if useful if not what was the you know challenges, what are the shortcomings, how do you address it. And what if any changes have been made to the intended activities? In case if you wanted to improve upon add some more changes to the activities what could be done.

All materials, information, presentation suitable to the target audience? Whether the information is provided or a discussed and deliberated during the training program was suitable to the target audience. We are referring to the participants and the learners in a training program. So, this is about a process evaluation.

(Refer Slide Time: 22:11)



Next comes the outcome evaluations. What does that outcome evaluation is all about? It is concerned with the long-term effects of the program and is generally used to measure the program goal because if you look at in a training program which are having a goal. So, goal maybe like reducing the deficiency you know performance deficiency can be one or probably you know increasing the knowledge level or increasing the skill right. So, this can be a goal.

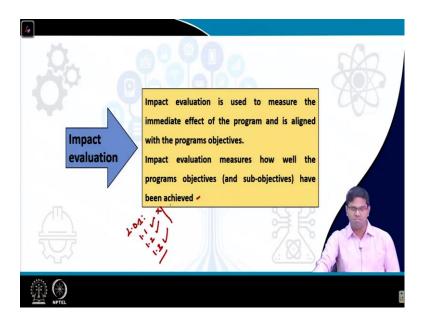
Now, you want to trying to see whether the program which resulted in creating reducing these performance deficiency in the workplace was it actually resulted in improving the knowledge level of the target audiences or the participants of the training program, is it

really helping you know owning a new skill which they learnt during the training program because eventually which will have a long-term impact for an organisation goal.

So, this training goal will be see let us say training goal is should be associated with the organisation level goal. So, if you recollect what we you know discussed in you know module 3 business strategy. Does it actually contribute towards the larger goal? Because there should be an always an alignment with my training goal which has a direct relation with a business strategy.

So, an outcome evaluation measures how well the program goal has been achieved whether they were able to achieve the objective of a particular training program.

(Refer Slide Time: 23:46)

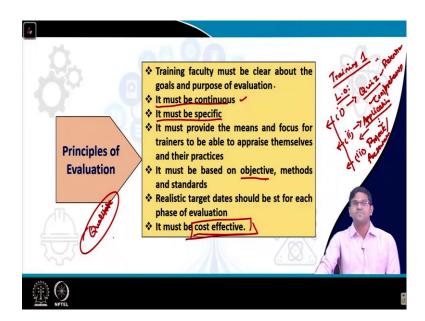


Then comes an impact evaluations. So, the impact evaluation is used to measure the immediate effect of the program and is aligned with the program objectives. Impact evaluation measures how well the program objective sub objectives have been achieved for example, let us say learning goal 1.

So, the learning goal 1 had sub objects 1.1, 1.2 and 1.3 and you know after this you know impact evaluation you will have to measure what are the immediate effect of the program, whether it is aligned with the program objective, where is it able to generate the learning among the employees where this 1.1 is achieved, 1.2 is achieved, 1.3 is achieved

or in case no if it is no why what was the deviations all that is part of the impact evaluations. These are the different type of evaluation as per the time based ok.

(Refer Slide Time: 24:32)



Now, let us try to you know understand you know learn the some of the aspects of the principles of evaluation. So, here the first principle of the evaluation is training faculty where we are referring to a trainer or who is going to deliver a training program must be clear about the goal and purpose of the evaluations.

One has to know why this evaluation, what is the purpose of this evaluation because when we are trying to you know develop a training program the trainer should know in what aspect the learners have to be evaluated. Why these evaluations, how these evaluation will be connected to the goal of an organisation which is very important a trainer has to know.

For example, I am conducting a training program. Let us say a training program 1 ok. Now, so I will have a learning objective for a training program how will I evaluate you know are we am I going to evaluate them through a quiz which is to test the retention aspect or the comprehension whether they able to understand the concept been discussed ok.

Now, the application orientation I can also evaluate them on application perspective right whether they were able to learn and apply it in a specific instances or a situations,

whether on this perspective can be in multiple. This is one method; this is another method or probably I want them to do a short project which is also part of a sub component of an applications and you know presentations.

There is multiple method in which you will evaluate, but you know you should know what is the purpose of this evaluation the trainer has to be knowing what is the purpose of evaluating through a quiz. We are intended to know the comprehension level of the participants or the retention capacity of the participant to recollect the important concept discussed during a training program.

The application perspective how good they are able to you know apply what they learnt in a similar situations or a different context or about you know how they able to resolve a problem through a training program. And the continue you know the evaluation should be a continuous process. This is also one of the principles of evaluation as I already said yes it should not be a one-time activity rather it should be a continuous process. So, you should continuously evaluate the training program.

For example, let us say you are conducting a training program whether the training has started on time this is one check and on that the same day are we going with the same schedule is there a change in the in a schedule was you know any overlap is happening or crossover is happening all that.

And it must be evaluation must be very specific it should be very specific, it should not be vague, it should not be very generic that are does not help in addressing a particular problem or helping an organisation to improve or you know get some in insights on what are the shortcomings. And it must provide the means and focus for trainers to be able to apprise themselves and their practices. It should provide insights to the trainers to you know learn about you know where they were really doing good and what is been happening was rightly delivered and all that.

And it must be based on objective, methods and standards. It should have an objective; it should have a very specific standards and methods of evaluating. It cannot be you know so vaguely or not even the tool or the method of assessment does not have reliability and validity as I was saying yes. How consistently we are measuring and how the tool or the method is valid enough to measure or evaluating what we are really intended to evaluate.

And it should have a realistic target date should be set for each phase of the evaluation. You should set a realistic evaluation what is that you know phase in which we are going to evaluate and it also be a cost effect. It should not you know incur more costs in the evaluations, but at the same time it is very important the quality of evaluation is also important ok.

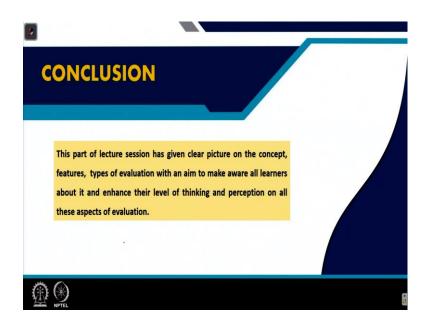
So, I am talking about quality of evaluations. So, you cannot compromise just because of the cost that you know you do not do a quality assessment or the evaluation of the training program. So, it should always keep in that you know integration of the both the perspective as these are the principles of evaluation.

(Refer Slide Time: 28:41)



So, in today's lecture we you know introduced to the concept of evaluation.

(Refer Slide Time: 28:45)



What are the different types of evaluation based on the quality, based on the time and we also learnt about what are the principles of evaluations, why evaluation, what are the basic features of an evaluations because this is going to provide a lot of insight for an organisation to how to improve their training programs.

So, that they can if the best training programs can be repeated or there are some shortcomings that can be always addressed by learning from the previous training program. So, we are going to learn specifically about how do you evaluate the training program in the subsequent lectures.

Thank you.