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

**Module – 06: Training Evaluation** 

## Lecture - 28 Training Evaluation Process

Welcome to lecture 28. And today we are going to discuss about Training Evaluation Process. In the previous lecture, we learnt about you know what is training evaluation, what are the different types of training evaluations. We talked about you know formative evaluation, impact evaluation, outcome based evaluations. And today, we are going to learn about what are the training evaluation process let us get into the lecture ok.

(Refer Slide Time: 00:46)



(Refer Slide Time: 00:48)



So, when we talk about you know evaluation of a training program which essentially focuses on basically whether the training program able to meet the objectives and whether a participant enjoy the training programs. If you ask a question, is that sufficient to evaluate a training program.

Is about you know which is only about whether the objectives are met and the participant enjoyed the process during a training program, is it the only aspect when you want to evaluate a training program?

It is not only sufficient assessment of the training only those aspects are not sufficient because the ultimate success of a training is always lies on how effectively the learners are able to apply what they learnt effectively on their job that is the main intention of a training program evaluations; because, we are not trying to look at an immediate outcome of a training program.

Immediate evaluation which is about let us say this is a 3 day training program and let us say you have schedule for day 1, let us say day 1, 2 and 3 and you have conducted the training program and you collected feedback at the end of the day 3 ok, at day 3.

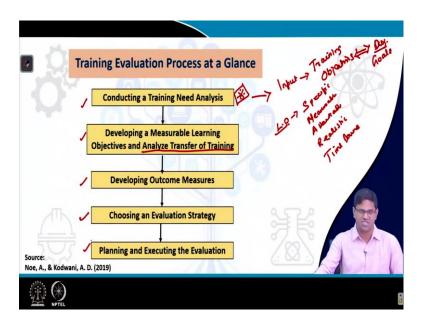
And you say yes, the training program is good and feedback is good. So, their end side you know evaluation not really where you are (Refer Time: 02:08) talking about is transfer of training whether they were able to effectively apply at their workplaces

because this is what will result in outcome output to outcome for an organization and that outcome will result in an creating an impact for organization which is what the important outcome of any training program which is not about just the successful completion of the training program, it is a focused either on. So, what does it actually resulted in?

Is it does it resulted in my employees going back and become confident in what they are doing earlier or probably they show their improved performance they apply their new learning's in their workplace that is what where the success of a training program is determined ok.

So, the evaluation is ends there when they are able to apply and continue to apply it is not about one day they apply and they stop doing; it is that is where you know that is not an intention of any training program this training program success is determined based on how sustainable that learning they are showing in their current workplace ok.

(Refer Slide Time: 03:18)



So, let us see the training evaluation process which is a kind of a sequential steps which you know which starts with conducting a training analysis, because as we are again reinstating the fact that you know this is a very critical step of a training program. Because it provides an insight or input it provides the input for a deciding a training goal or a training objective and ensuring this is in alignment with organizational goals ok.

So, this is why you know the evaluation also should begin where the training need assessment is conducted. So, how well the training need assessment is conducted what is the method employed whether the method a used in training need assessment is effective, the analysis out of the training need assessment was precise and useful information are generated out of the training need assessment. So, that also have to be evaluated so that the subsequent activities become successful.

Then comes developing a measurable learning objective which is very important, if you recollect what we discussed in one of the modules which you know you need to see that whether the learning objective is following a smart approach where we talked about whether it is specific, measurable ok.

It should be measurable; it should be very specific learning objective which is attainable. It should be realistic in nature and it should be time bound. So, see that you know whether they are able to develop a measurable learning objective and also analyze the transfer of training.

How far the transfer of training is occurring whether it is a near transfer of training a far transfer of training, whether it is a generalization or on a maintenance of the transfer of training whether they are able to apply it.

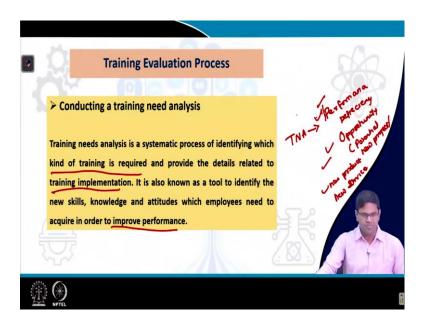
Then, comes developing an outcome measure what is the outcome measures that you will measure for a specific training program because you should always see what is the end outcome of a training program; then, choosing an evaluation strategy which is very important.

What is the evaluation strategy you are going to do? You also talks about you know method of evaluation, as we already know the evaluation is a continual process and what ways in what are the strategies you are going to do.

Are you going to go for a quantitative method of a measuring the evaluation or is it a qualitative or both a combined method of quantitative and qualitative together you are going to evaluate the training program. And the last one which is very important is about planning and executing the evaluations.

How you are going to plan and execute the evaluation execute in the sense ok you decided on method tool and instrument to evaluate then how do you execute in measuring or documenting or collecting the sufficient information and doing the analysis and coming out with the outcome of the particular evaluations, because that is become a critical for a management to see the effectiveness of the training program and what is the scope for improvement in the existing training program. So, these are the process we are going to see in detail about each of these stages ok.

(Refer Slide Time: 06:29)



Now, first is about conducting a training need analysis. We already spent a lot of time on this in one of the modules. So, training need analysis is a systematic process of what are we doing? We are trying to identify it what you know which kind of training is required. So, what is the training requirement and provide details related to training implementation, how will you implement the training program.

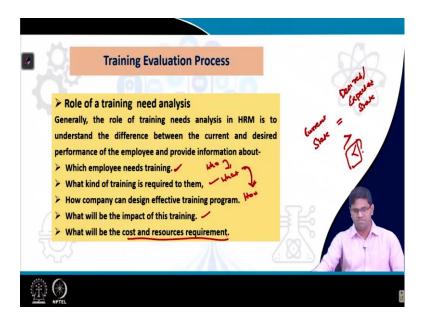
So, what type of a training is required and how do you implement the training program, it is also known as a tool to identify a new skill or a knowledge or attitudes which employees need to acquire to improve their performance. Because the as I said a training need assessment analysis which provides input on ok.

What are the performance deficiency ok which is either a performance deficiency it will identify performance deficiency or opportunity. If you recollect the opportunity, we are

talking about potential new projects or a new product or probably a new service which is what we are talking about as an opportunity.

Does my training program is focusing on and developing a skill a knowledge for employees to bridge the deficiency or is it focusing on in you know learning a new skill or a tool which is going to be an opportunity for a company to you know venture into a new business or a new avenue which is a part of a strategic goal ok.

(Refer Slide Time: 07:59)



So, the role of a training need analysis because generally the role of a training need analysis is to understand the difference between the current and a desired state which is always you know comparing. So, what is a current state against the desired which is the desire or expected state ok.

If it is equal no problem, if it is you know more than this very well very happy; every organization is actually looking for it, but the situation if there is you know less than the you know expected then that is where the focus should be on by it will provide input on how to improve the training program.

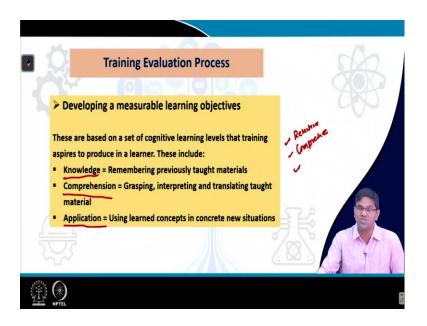
So, and you know this will say you know which will give information to organization which employee need a training program which section of the employee, I do not need to conduct training program for everybody maybe some pools of employee do not perform really well I need to focus on.

So, this will provide input on who needs training program, what type of a training is required to them. So, who, what and how if you see this is kind of a rolling down to the next level of questions. So, who need a training program what is what type of a training program is required and how it should be implemented.

So, that you know they are able to learn and meet the improve upon the skills which are required and what will be the impact of the training program what does it going to result in how it is going to improve their performance and how it is going to impact their you know workplace performances or my overall organizational performance altogether.

And what will be the cost and resource requirement it will also say ok what is the requirement a resource requirement a trainer requirement in terms of a financial resources as well how much my company has to invest to conduct the training program. So, that you know this specific set of employees can be trained on this type of a training program ok.

(Refer Slide Time: 09:48)



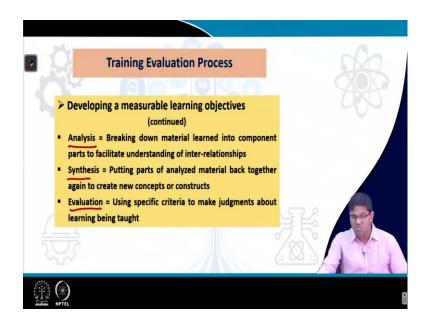
Now, comes the next about developing a measurable learning objective. So, there are these are based on a cognitive learning level and you know this focus on trying to see you know knowledge level what is the knowledge which you are talking about remembering the information being taught ok.

So, and it should also focus on comprehension ability whether they are able to interpret and understand what is being you know trained on what is being discussed during a training program. So, then application oriented whether you know where they able to use the concepts learned in a new situation.

So, when you are talking about you know developing a measurable learning objective you should focus on all this whether only is about the retention capacity retention, comprehension whether they are able to understand when you know see the learning objective, you have to focus on all this perspective.

And, next is about application oriented where do are you going to focus on creating a scenario where they will be applying whatever they learnt in new situations or a new setup itself. It should not be on only on an identical situation or you going to provide a training program or a measure that were they able to effectively use it in a non-identical situation those skills they learnt.

(Refer Slide Time: 11:04)

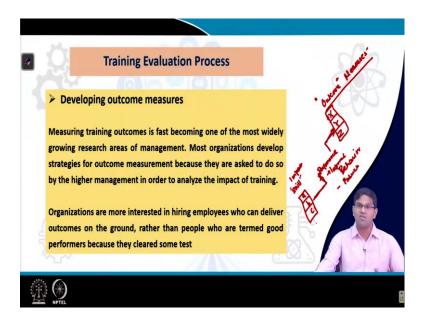


Then, how about you know analysis? So, focusing on analysis which are talking about breaking down the concept which are learned into component to facilitate understand the interrelations between the concept.

So, you are trying to application oriented perspective of this then comes synthesis. Synthesis is focusing on putting parts of the analyzed material back together again to create a new concept where they able to engage effectively on using the learning to come up with a new concept or new way of handling things or focusing on it.

And evaluation using a specific criterion to make judgment about learning being taught whether you know you should also see how you will be evaluating. So, this is how you know to develop a measurable learning objective and you know. Then, next comes developing an outcome measure. So, when we discuss about you know developing a measurable objective.

(Refer Slide Time: 11:47)



As I said yes application of smart principle is very important, the objectives should be specific measurable attainable realistic in nature and also should also focus on various aspects of the learning which is about the ability to retain, comprehension application oriented synthesis oriented and all that.

Now, comes the developing outcome measures. Measuring training outcome is you know becoming one of the most widely researched area ok. So, the most organization develop strategies for outcome measurement because they it is very important for them to understand what type of an impact my training has actually resulted in.

So, because you know it is not about only about an immediate result which we are discussed about in earlier slides that yes are we concerned about a how successfully we

conducted a training program or are we concerned about how does my training program impacting my organizational growth or what type of an outcome it is recreating.

So, it is important to see what are the outcome measures you are going to relate. For example, you should be you know organization has to decide, what will be my outcome measures? Let us say X, Y and Z these are my outcome measures. Why this is important to understand is that you know see, let us say I am focusing on specific skills set which is a, b, c you should always see the link between this process of connecting with the outcome measure.

So, you have to connect to this you know you when you say that skill this is a skill which you wanted to impart through training program ok now what will happen this skill will be resulting in the specific performance. The performance can be in terms of improved behavior or probably you know improved productivity.

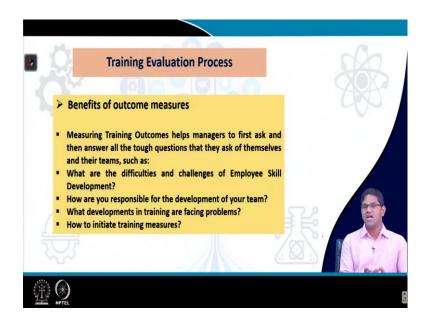
So, now, this has resulted in the outcome what is the outcome, now you need to see you have to develop a measurable outcome. So, how do you measure these outcomes X, Y, Z, how will you measure? So, this is very important so that you will know what is the impact my training program is creating.

So, organization has to actually develop these outcome measures. So, that against which outcome you will be able to evaluate the impact of the training program. What does it actually result in? Whether that is resulted in an outcome which we are trying to measure through the training program?

So, because this is how the connection becomes the outcome measures are very critical unless otherwise you are not developing an outcome measure which are not aligning with this particular skill you know skill set which are imparted to a training program then there is a misalignment and you finally, what will happen.

The conclusion will be that you know training program not resulted in a better outcome. So, it is very important it you know the outcome measures are to be developed in aligning with what with the type of a training program you are going to create.

(Refer Slide Time: 15:18)

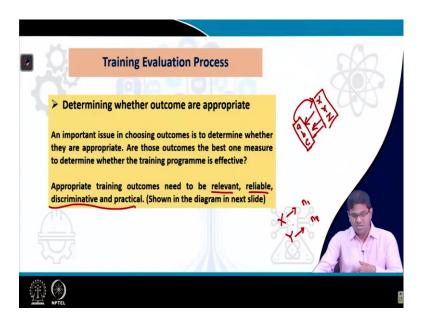


So, there should be an alignment you should always ensure that outcome measures are not creating any misalignment with a training program which is being designed. So, this is always you know relationship between the outcome measures versus the training program you are going to develop. Now, what are the benefit of the outcome measures?

See the measuring training outcomes which always helps manager to first ask and then answer all the tough questions; for example, what are the difficulties and challenges of employee skill development? And you know how are you responsible for the development of your team? What developments in the training been faced by the participants? What to initiate you know how to initiate the training measures?

So, these are all some of the important benefits of the outcome measures. So, the outcome measures will always you know help them to you know set some of these challenging aspects of it you know how what are the challenges and difficulties the employee skill development and how do you initiate the training measures? Ok.

(Refer Slide Time: 16:01)



Then comes, determining whether the outcome are appropriate? So, what is very important? You need to understand whether the outcome what we are seeing is appropriate or not.

So, the important issue is that you know are we choosing to determine whether they are actually appropriate as we have discussed you know when we said a, b, c versus X Y Z now you are actually you know evaluating to see whether those are appropriate or not you know.

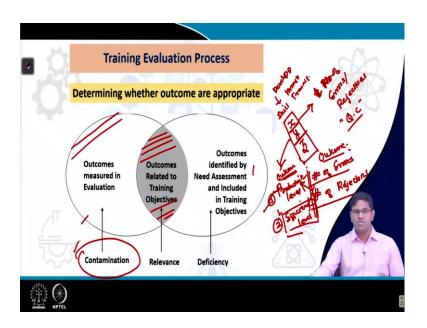
So, these outcomes should be a one best measure to determine whether the training program is effective or not because when you conduct an evaluation and you collect information's that information is not specifically on the specific training program, then what will happen? You know you are not actually evaluating the right type of or you are not employed a right method or a right measure or a tool in evaluating training programs.

So, when you are talking about a training outcome, it should be relevant, and it should be reliable and it should be discriminative and practical. So, what are we trying to say is that now when we are talking about a training outcome should be relevant which would be relevant to what for example, relating this X, Y, Z and how relevant it is through learning this skill.

So, you always find that you know a, b, c will improve this X Y Z then you should be ok this training is relevant. It is reliable the evaluation whether it is reliable whether it is consistent when we measure through multiple times where a different way people also use the tool where, for instance you are trying to evaluate a particular training program. So, well say person X is you know administering the tool and the result let us say the result is n 1, let us say person X is evaluating the result is n 1.

If person Y is evaluating it should also be the same n 1, if it in case something different then this instrument is not you know consistent, it is not reliable instrument ok.

(Refer Slide Time: 17:54)



So, let us look at you know. So, what will happen if the outcomes or the evaluation which you are measured is not properly or what we are related to the specific training. What will happen? It will become contaminations let me talk about what we refer to as a contamination.

See, we are measuring an outcome ok. So, let us say I we have identified a training need assessment ok and which is resulted in a training objective. So, what are we doing? So, based on the training need assessment, we have developed a training program. Now, comes we are trying to identify the outcome measures.

So, what is the outcome we are trying to expect? For example, let us say I am conducting a training program to you know develop a skill on x, y and z ok. Now, I should see if

somebody employ this skill. This is a skill which I am trying to develop ok develop through training ok. Now, I should be knowing if somebody use this skill x, y and z what is can be the potential outcome? Let us say it will improve their productivity let us say it will improve their let us say the number of errors or rejections let us talk about this way ok.

See, now this skill set will only improve means reduce the number of errors and reduce the rejections during the Q.C which is a quality you know quality assessment ok. Now, now let us say what is the outcome? In this case what should be the outcome measure? How many numbers of errors and number of rejections, correct? If you look at see this skills x, y, z will always result in reducing the number of errors and number of results let say this is what it would result.

Now, let us imagine this should be ideally an outcome measured. Now, we imagine a situation instead of this measuring the number of errors and number of rejections you are talking about the productivity level is one outcome measure and two we are saying the efficiency level that is a. Now, this has not connected to this number of errors and number of rejections ok maybe productivity maybe related, but now let us independently take it as an example ok.

Now, if you keep this as an outcome measure, what are we trying to do? See my training program is trying to develop specific skill set. Now, you see number of rejection and productivity are related right. So, let us say you know rejection is less and the productivity is increasing, but if you look at efficiency level efficiency may not improve because of this you know the time efficiency or the quality of what type of do they think they do.

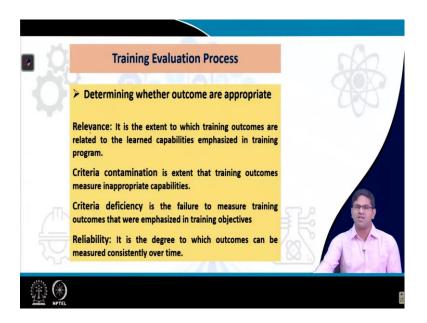
Now, if you look at if their outcome measures the number of rejections will related to probability, but not on this. So, if you keep this as an outcome measure what are trying to do is the outcome measure is contaminated you always see there is an only this part which actually relevant the outcome measure is relevant only the productivity is actually relevant to the x, y, z, but this efficiency is not even related.

So, if you keep the efficiency as outcome measure what are we doing? The information you collect or the outcome measure you are coming up which is actually contamination which is not a real way of measuring the outcome for a specific training program.

Because my specific training program is trying to develop x, y, z which can impact the productivity, but not on the efficiency, but if I include efficiency as outcome measure what does it actually happening is which is the contamination, I am actually collecting information which are not even related to my training program at all.

So, that is where the you know contamination comes that is why it is very important why you need to identify an appropriate training outcome which are related to the specific content or what it is intend to develop. So, which is what the validity perspective also ok.

(Refer Slide Time: 22:12)

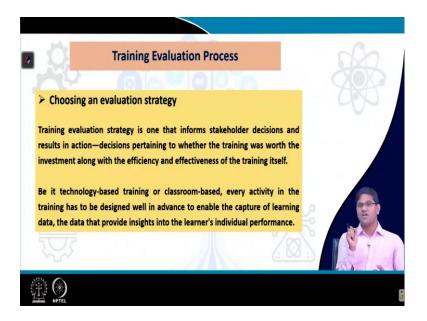


So, now, let us look at know how do we determine whether the outcome are appropriate. First is about relevance, whether to whether it is as relevant to the specific training program whether the training program is able to you know develop a capability which are emphasized in a training program.

So, whatever the training program intend to create whether that has been captured part of a training outcome, outcome measures then comes the criteria contamination see extent which is a training outcome measured inappropriate capabilities you know you cannot measure something which is not done through part of a training program. So, if you have developed you know x, y, z if you are measuring a, b, c which is absolutely wrong. So, either there is not you know relation to it.

So, it should have always had a reliability the degree to which the outcomes can be measured consistently over a time. So, as I was saying yes, the outcome measures should be appropriate when there is reliability and validity also ok.

(Refer Slide Time: 23:03)

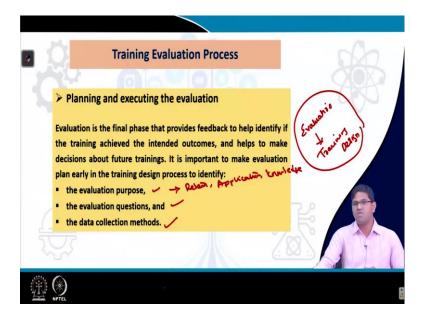


Now, next come to the last stage the one last stage is about choosing an evaluation strategy. The training evaluation strategy is a one that an informs stakeholders decision and result in actions which pertaining to whether the training was worth the investment and along with an effect even as an efficiency.

Because the training evaluation strategy is going to serve all my stakeholders means my management people or my investors on saying that ok is it ok to spend these resources for a specific training program. Along with what does the outcome of the evaluation say whether it can be a technology training, it can be a classroom base whatever it has to be; it has to be designed well to enable the capture of learning and it has to be evaluated properly so, that you will know the know training is actually beneficial for an organization.

So, organization can take a decision to invest the money or resources on a specific set of a training program. So, the training evaluation strategy should be important to understand ok what type of a training strategy we can evaluation strategy we can go so that we will find out the benefit of a training program.

(Refer Slide Time: 24:10)



So, planning and executing the evaluations. So, we always see you know evaluation is a final you know phase that provides feedback to identify whether the training achieve the intended outcomes yes, we always see that you know evaluation is helping to see whether that is able to achieve the outcome and it helps to make the decision about the future learning earning what are the improvements we can do about the training being conducted.

It is important to make evaluation plan early in the training program as I was saying evaluation its integrated part of a training design itself ok it should be part of a training design it cannot be an independent exercise it should be part of a training design itself. So, that you know you need to plan early. So, so when we, why it is important when we plan early? You will be able to know when to evaluate, what time to evaluate, what to evaluate ok that is very important.

So, which is how important to identify the evaluation purpose, what is the purpose of the evaluation are we focusing on retention of the employee or are we talking about application capability or are we talking about you know knowledge level how do we measure.

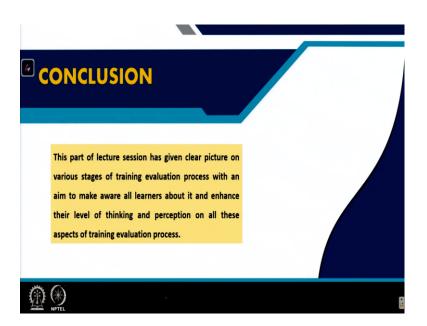
So, purpose of evaluation is important. Then, it also see evaluation questions and how do you going to evaluate the you know method in terms of questionnaire, survey or you know qualitative interview or oral feedback; whatever in which you have to collect the

identify the method or and you know determine what method you will collect the feedback from the employee so, that it can be evaluated ok.

(Refer Slide Time: 25:43)



(Refer Slide Time: 25:44)



So, today we discussed about the training design process where in we start started from the training need assessment which is very important component of a training program because that is actually tells you what is the content of a training program going to be, what is the learning objective. Then, we result you know understand ok what are the method learning objectives will be created; whether the learning objective will be applicable which are measurable, specific, attainable and realistic in nature and how do you develop the you know outcome measures.

Because that is very important whether the outcome measures are aligning with the training program which are designed which is whether this is there is an appropriate training method, training measures or outcome measures are being identified. And, the next step is about you know determining the evaluation strategy what type of strategy are you going to follow in evaluating?

Is it going to be one time evaluation or is it going to be multiple evaluations or you are going to have a different type of evaluation, let us say one you are going to focus on this training content and you will evaluate on the ability of a trainer then you will evaluate on the outcome of a training and next is about the impact evaluations, what is the impact does it create.

So, then the strategy has to be really developed well as I said yes, are you going to focus on the evaluation components or the content and resources being provided. Then, once you develop the evaluation strategy then you need to plan and execute it. So, when you plan it, you need to identify what method, what interval, what is the tool I am going to use, how are you going to develop the tool, do you already have the tool within the organization or you are going to customize the tool with the help of it or you going to validate the tool.

Then, the method of collection is it going to be a direct method or an indirect method or is it going to be through a survey or a questionnaire or is it going to be an interview method ok. Now, I conduct the evaluation by administering the survey or a questionnaire or an interview. Now, comes how I am going to analyze it then how I am going to communicate this particular outcome of the evaluation that is also very important.

Because it is not that you know you conduct the evaluation then the outcome has to be communicated it has two purposes as we discussed in the first lecture as well it is going to serve as to determine whether my training program able to develop the specific objective or the outcome which they are able to achieve it.

Another is about does it actually resulted in creating a specific skill set for my employees and also it will give insight to how to improve some of the shortfalls of a training program maybe the participants would have said they did not like or maybe they found it not useful for a training program to be offered.

Then, comes the next component aspect of it is about ok maybe the training evaluations resulted in identifying the content which are not relevant for the specific audiences. So, now, this provides an opportunity to revisit and review and revise the content of a training program.

So, that if in case if an organization going to offer a similar set of a training program to the next batch of the employees. So, this can be addressed so, that these shortfalls are addressed and the next subsequent training programs will be effective. That is why you know the training evaluation is very critical. So, today we learnt about the training evaluation process.

We will be learning the other techniques and other aspects of the training evaluation in the rest of the lectures.

Thank you.