

Training and Development
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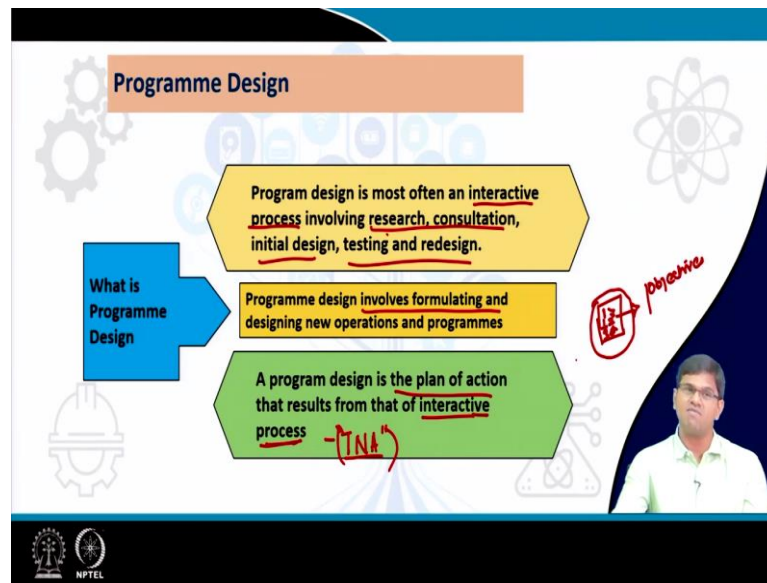
Module - 05
Lecture - 22
Training Programme Design

Welcome to lecture number 22. In the previous lecture we discussed about understanding what is a programme and what is training programme. And in today's lecture we are going to discuss on a Training Programme Design, how do we design, what are the key components of training designs when we are planning to conduct a training programme ok.

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So, we will begin with developing an understanding on a programme design, first as we did in the previous lecture then we will move on to training design. So, when we said a programme, we already said yeah it is a series of events that are directed towards achieving an organization call.

Now, when we are talking about a programme design; so, programme design is always viewed as an interactive process because you know it is not you know just one-sided process, because it is an interactive process or key stakeholders or being involved through need assessment, we are training to understand ok, which involves research, collaboration, initial design, testing and redesign. So, we will it is such a, we are trying to understand from a larger level of a programme design then we will go to a specific level and training design.

So, the programme design which is an interactive process resulting from a various activity; it starts from research to review the existing work and understand what has been done on this particular one, when we are focusing on specific object of it, aspect of it, then collaboration with the key stakeholders trying to come up with a few designs and you know validate the design, whether the design will be working well and redesign when there is an insufficiency in delivering the objective.

Then you know it also involves formulating and designing a new operation or a group of programmes, when you talk about programme design; programme design is always about

formulate and design a new programme, which are directed towards achieving the goals or an objective of the programme.

Then you know programme design is a plan of action that results from an interactive process as we said yes programme design is an interactive process which is a plan of action. So, when we say programme design it will talk about ok what are the things, let us say this is a programme we will decide ok; what is the sequence of activity and what type of activities we are going to have or what type of events you are going to have, what is the sequence of those events.

So that we are going to achieve the objectives of a programme; objectives of the programmes are achieved when by the programme design will also talk about yes let us say 1 2 3 4. So, what is the sequence are you going to go from 1 to 2 to 3 or are you going to start from 1 to 3 and then go back to 2. So, this is about a programme design which will talk about ok how will you determine which activity do and what is the sequence of those all become a part of this programme design which is always a resultant of an interactive process.

When you talk about an interactive process, yes; it is also if you refer to training need assessment how it has been done through various methods of you know interview methods, focus group, questionnaire, survey and also talking to people observation; so many things are involved, which is an interactive process which will identify how the design of programme should occur. So, that we will be able to effectively meet the objectives of the particular programme.

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The slide is titled "Training Design" in an orange box at the top. Below the title, a blue arrow points from the text "What is Training Design" to a yellow hexagon containing the definition: "Training design is a plan to develop new training and educational courses and lessons for existing employees." Below the hexagon, there is a hand-drawn diagram in red ink. It shows the letters "TNA" with an arrow pointing to a vertical box containing the numbers 1, 2, 3, and 4. Another arrow points from this box to a smaller box containing the number 7. The slide also features a small video inset of a man in a green shirt on the right side and the NPTEL logo at the bottom left.

Now, let us understand the training design; what is training design? Training design is nothing but a plan to develop a new training or an educational course material and lessons for the existing employees. So, training design is always about developing a new content or a course content for a particular training programme for my existing employees.

Let us say through training need assessment we would have identified 1 2 3 4, these are the needs of my employees. To meet these needs or improve my employees on this particular deficiency area, I am trying to develop a training programme with course materials, content and the method of conducting the training all that will be part of it, which is called a training design.

So, which is about always a developing a new training course material or a lesson for existing employees, specifically to address their deficiency or may be to on a creating the future opportunities in an organizational setup ok.

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The slide features a title box on the left, a central text box with four bullet points, and a small video inset on the right. The background includes decorative icons of gears and an atom. A red handwritten-style circle with an arrow points to the word 'Objectives' in the bottom left corner.

Importance of Training Design

- Without meaningful and logically designed training modules, even the most experienced and skilled trainer will not be able to conduct it.
- Knowing how to create the right kind of programme enables to keep participants engaged every step of the way.
- Training designed with structure by using effective tools and frameworks will support in achieving its objectives.
- Essentially, good training design is the backbone upon which successful training course is built.

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Now, so why this training design is important? Because, unless otherwise you are not doing a very good training design even without that even a mean without a meaningful logically designed training module. Even you know who is been a trained trainer can also fail to conduct it.

So, it is very important even from the trainer and expert perspective unless you are not making a logical training module it cannot have no even a trainer or an expert cannot deliver it to the participants to the learners. That is why training design is very important it should be made meaningfully and logically so that the trainer can deliver it ok.

Then knowing how to create a right kind of a programme will enable participants engaged in every set of steps of the way. See unless otherwise you know you are not designing properly, what will happen? Your training participants or your employees may not be engaged they may not enjoy the training process.

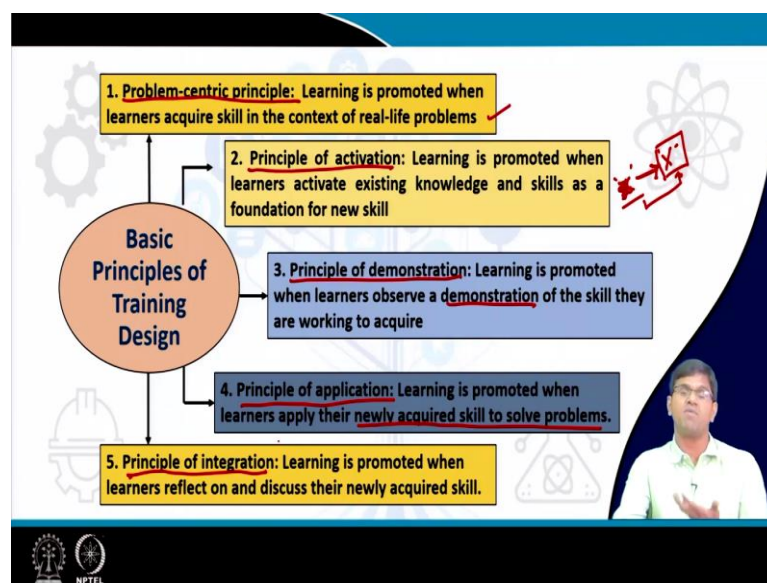
They feel like you know they are feeling disconnected they will feel like you know I think you know this training programme is not giving me or allowing me to learn something which I do not relate with the training programme, where I feel like you know this training programme is absolute in a different direction, why I have been here sitting here wasting my time.

So, training programme design which has larger implication of how engage your employees. Unless you are failing in this designing phase you will not attract the employees or you cannot attract their attention during the training programme. So, training design with a structure by using an effective tools and frameworks will support in achieving the objectives.

So, fine you know essentially what are we interested in? We have identified an objective right. So, now, the training design has to help me to achieve this objective unless if my training programme is not planned or designed effectively it cannot reach realize the objectives which we are planning for.

And good training design which is a backbone upon which a successful training course is built. So, unless there is no specific proper training design has been done, it will be very difficult to make a successful training programme ok. So, that is why training design is very important ok.

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Now, let us understand the basic principles of training design when you are wanted to design a training programme, we will have to understand some of the basic principles bases on which we will be able to develop a training programme. 1st is a problem centric principle. See the learning is promoted when the learners acquire skills in a context of a real-life problem. So, which is very important does your training programme is centered around a specific problem; what you are really wanted to address on.

So, when you are addressing a specific problem, you will always feel that you know learners will acquire skill or they will be you know really interested when they feel like you know I am going to learn a specific skill which are going to solve resolve the problem which I am encountering in my workplace.

So, your training programme should have some component to offer some solutions to the problem that your employees potentially experiencing, experiencing or potentially about to experience a problem in a work setup. Then 2nd principle is a principle of activation. Learning is promoted when a learners activate a set existing knowledge skill as a foundation for a new skill. For example, let us say you are aiming to develop a new skill set let us say called X.

So, for that my employees already should have some basis before this precursor of this particular skill set. So, you have to activate that. So, that now they feel like a let us say small x to a you know a capital X, I am just giving a some you know pictorial depiction so that you will be able to relate. So, now, when you know that my employees know this small x.

Now, I am trying to activate that. So, that they feel comfortable and happy and promoted to learn a new skill which provide a foundation for a new skill. So, that is a principle of activations how do you activate that yes, you have some basis skills. For example, when you wanted to teach students on analytics when you talk about analytics it has a basic foundation or you know mathematics and statistics which is going to help you to understand the other aspects of analytics how do you interpret the results ok.

Now, comes to the principles of demonstration. A learning is promoted when a learners observe a demonstration of a skill they are working to acquire. So, for example, when you in a part of a training programme, if a trainer or experts are demonstrating the skills which they are you know learning going to acquire during the training programs that will actually promote lot of learning to acquire during the training programme.

So, as we are already said yes, some demonstrations from an expert especially when you are training to learn a tool or on a missionary or on a technology yes if the demonstration the principle of demonstration will act you know accentuate more learning to occur during the training programme. Then comes the principle of application learning is promoted when the learners apply their newly skilled acquired skill to solve problems.

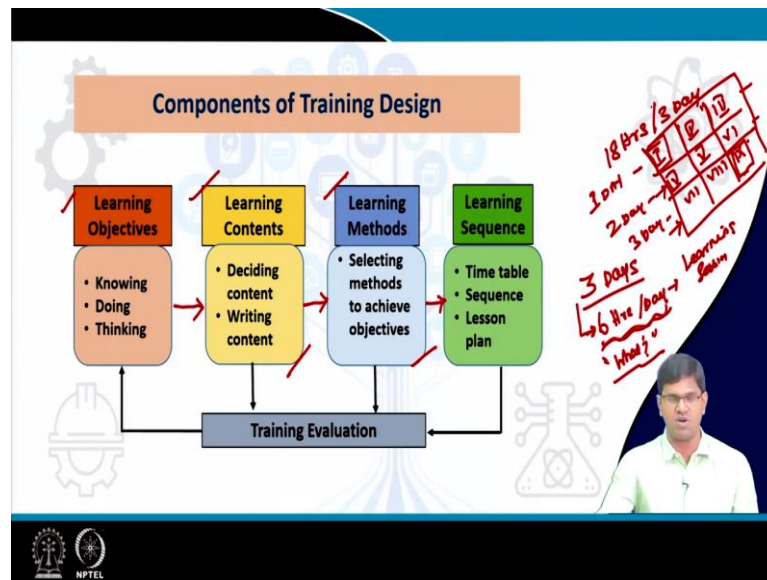
So, which is again you know whether the learner are have an opportunity to apply whatever they are learning to solve a problem; either create during a simulated environment in a during a training programme or when they go back to a workplace are they able to apply their learnings in them to solve the problems, which will actually provide more interest among the learners to learn it.

So, this is a principle of application does my training programme have any application to the learners are they learner going to learn something which then they go back and apply in their workplace or in your current problems they encounter then comes a principle of integration the learner is learning is promoted when learners reflect on discuss their newly acquired skills are they giving more opportunity to you know reflect on what they have you know learnt new skills or a new knowledge or enhanced knowledge.

So, do they give get an opportunity to you know reflect upon what is my learning, how I am going to use it, can I integrate part of my existing workplace that will actually promote more learning to occur.

So, these are the five basic principles when you have to keep in mind when you are training you know designing a training program; either you are to focus on problem centric principle, principle of activation, how do you activate my employees to attract more interest and principle of application, principle of demonstration principle of integrations. So, this will provide more interesting participation or engaged participation from the learners ok.

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Now, comes what are the components of a training design? Now, having understood how do we design a training programme. Now, we need to understand ok so, I need to apply those principles. Now, you should understand what does the training design includes the components are very important aspect of a training design.

So, the first one is learning objective ok. So, the learning objective is a very important component of a training design. So, when you wanted to create any training programme you should definitely have a learning objective L O which is very important. What does this training programme is going to offer or at the end of a training programme what he or she could have learned out of this training programme.

So, knowing doing thinking which is very important if you look at you know. So, it can also come from a training evaluation from a previous training programme that would have resulted in giving your learning objective then comes learning contents, what do they learn during the training programme deciding content of a training programme. So, what should be the part of the training module? Let us say if you are planning for about 3 day training programme. So, 3 days training programme.

Now, I should know each day let us imagine 6 hours they are going to be engaged on 3 days 6 hours per day and learning sessions ok these are training sessions. Now, I should know what I am going to have what will be there for 6 hours a day this is what you have to decide what should be the content and you know writing the content which are all part

of the learning contents which are very important against which you will be able to evaluate the training also then comes the learning method.

Now, we see if you look at now this is a kind of a sequence it goes. So, you have an objective that will have to drive me what should be the content for a particular training programme. After I decide what should be the content now, it is taking me to the next part of what should be the learning method I am going to use.

Select the method to achieve the objective it is very important what type of method are you going to use you know if you remember the different types we discussed about are we going to do experiential learning are we going to do auditory learning where only you know workshop kind of a thing or a conference where a delivery of lecture is going to be part of it how are may be a combination of the method you either you both you will have the lecture based and also activity based, what type of a learning method are we going to use to make the learners learn what we are interested in learning.

And then a learning sequence you have to talk about ok. What is the sequence of learning in terms of you know timetable sequence and lesson plan let us say 5 hours of 3 days let us say 18 hours right 18 hours for 3 days. Now I should know you know each session how long it is going to have 1st day, day 1 you should plan accordingly. Let us say I will have 2 hours of 3 slots it is a session 1, 2, 3; similarly, day 2 it will be 4, 5, 5; day 3 it will be ,7 8 and 9.

Now, I should also know ok which one will come Q which one will be 2 and what will be the sequence how the first day module will be related to second day module similarly is the case of how the secondary module will be connected how the end of the module I am able to achieve.

So, this is how you know to sequence your training activity also it is very important in a lesson plan which these are the components of a training design we will see in detail from each of the components of a training design ok.

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Components of Training Design

Learning Objectives

A learning objective is defined as a statement that describes the behavior the trainer expects participants to demonstrate as a result of the training. Learning objectives should be S.M.A.R.T., that is:

- S - Specific: says exactly what the learner will be able to do
- M - Measurable: can be observed by the end of the session
- A - Attainable: for the participants within scheduled time
- R - Relevant: to the needs of the participant and organization
- T - Time-framed: achievable by the end of the training session

(i) Skill is a Soft Skill
(ii) Project/ Problem/ Situation -> Answer

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So, when you come to learning objectives. What is learning objective? Learning objective is defined as a statement that describes the behavior the trainer you know expects participants to demonstrate as a result of the training programme, it is nothing but it is a learning output is always about you know at an end of a training programme what I expect my learners to have learnt through the training programme ok.

So, that is the learning objectives. So, the learning objective should be in a smart way. What is the smart way? It should be specific s stands for specific yeah say exactly what the learner will be able to do during the training programme. And it should be measurable yes can be observed at the end of the session that yes, I could see my learners are able to learn it you should measure the learning of my participants and it should be attainable for the participants within the scheduled time.

So, let us say you are aiming that you know somebody will be learning the skill, skill on a software let us say this is what I am trying to do ok. This is my objective its specific I am talking about 2nd I am talking about how do I evaluate measurable; yes, I would have given them some project or a problem or a simulated situation they would have addressed it.

So, I am trying to measure or maybe I conduct an exam to understand where they able to code or learn a software. 3 which is we are talking about attainable are they able to attain within the scheduled training days are they be in a position to learn what we are aiming

to create the learning and R stands for relevant, do they participants feel you know there is need of the participant and organizations are captured when you are designing a training programme then comes a time frame. It should be achieved will be end of the transition, there should be always a time boundedness when you are training a training programme.

So, your learning objectives should follow a smart approach which is specific measurable, it should be attainable and it should be realistic which are relevant for an organization and the specific job role and it is also be a having a time bound. Within the specific time period will the training programme will be able to develop create the training which is very important.

I should not have a larger objective, but my training programme cannot even cater to it maybe you know you will only introduce a software, but do not allow them to use the software then you are actually failing it. So, your training of the learning objectives should be very specific and you ensure that yes, this objective can be met within the training period when you are planning for 2 days yes within 2 days it is achievable which is it should be very realistic in nature.

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The slide is titled "Components of Training Design" in an orange box. Below it is a yellow box labeled "Learning Contents" containing the text: "Once the learning objectives are finalized, it is to decide what should be the training contents that can help to build up training authority, add value to training and encourage learners to be involved. Also, it is to see whether there is previous training contents before writing the contents for any training." To the right of the yellow box, there are handwritten red notes: "Skill on Software" with an arrow pointing to "Contents", and "Objective" with an arrow pointing down. The slide also features a small video inset of a man in a green shirt in the bottom right corner, and the NPTEL logo in the bottom left corner.

Then learning contents once, the learning objectives are finalized; now you need to decide what should be the training content you know. So, that you know it can help to build a training author to add value to the training encourage learners to be involved and

it is to see whether there is a previous learning contents before writing the contents for any training.

So, for example, when you talk about the same software development you know skill improve the skill on software handling the software. Now, when you are you know writing on the content before creating the content for the programme you should see where there are any previously available programme which are already offered what is the effectiveness of it can I use some content of it or I should create a new content.

So, you need to decide what is the content of a particular training programme, which is always given from the objectives. My objectives will tell me what should be the content for my training programme ok.

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The slide is titled "Components of Training Design" and is presented by a man in a light green shirt. The main content is on a yellow background and is titled "Learning Contents: Classification". It states that learning contents can be classified into two types:

- ❖ **Technical content** that focuses on a subject or a particular product such as, content related to programming languages, products, mechanical equipment.
- ❖ **Non-technical content** that focuses on interpersonal skills including communication, behaviour, empathy and the development of an individual.

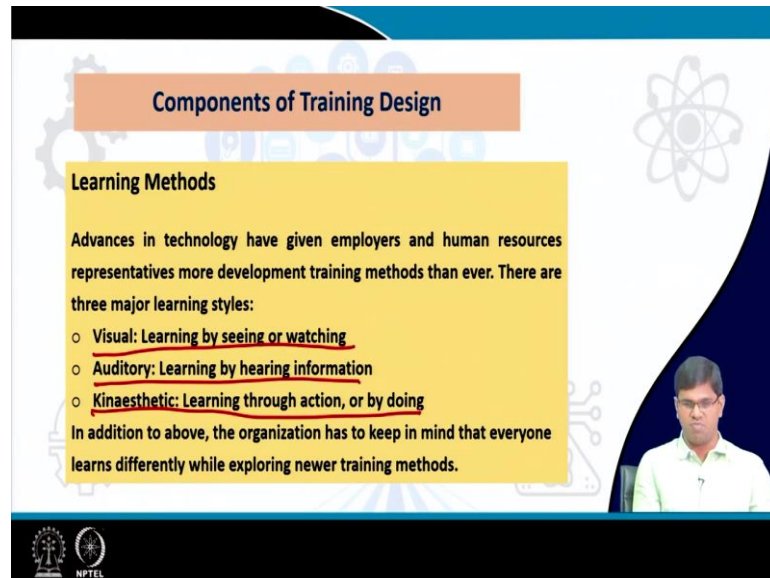
The slide also features a logo of a stylized atom in the top right corner and the NPTEL logo in the bottom left corner.

Then comes you know this learning content also classified into two broadly. You know it is a technical content this is specifically focuses on specific subject or a particular product such as, content related to programming language or a product or a mechanical equipment which is a technical aspect of it and then comes.

Because any training can learn content will have two components; one is the technical component of it, next comes the non-technical content which may be focusing on you know interpersonal skills or a communication, behavior or a development of an

individual or there can be a non technical content can you know you should also see what type of a content you are aiming to deliver through a training programme.

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The slide is titled "Components of Training Design" in an orange box. Below it, a yellow box contains the text "Learning Methods". The main text states: "Advances in technology have given employers and human resources representatives more development training methods than ever. There are three major learning styles:" followed by a bulleted list:

- Visual: Learning by seeing or watching
- Auditory: Learning by hearing information
- Kinaesthetic: Learning through action, or by doing

Below the list, it says: "In addition to above, the organization has to keep in mind that everyone learns differently while exploring newer training methods." The slide also features a small video inset of a man in a green shirt and a logo in the bottom left corner.

Then comes learning methods: - Now, having decided objective having decided what should be the content of my training. Now, I need to focus on what is a method I am going to use to create this particular learning in my learners. So, now, advances and technologies have given employers and you know HR departments to have more training methods than earlier they used to do. As I said yes lot of integrated training programmes are possible now, which are using you know you know a VR based virtual learning's are possible.

So many advantages have come and now we will talk about visual there are three major learning styles which is a visual learning by seeing or watching as we have already learned about the different types of learning, are we going to use a visual approach, are we going to use an auditory where we are in, we are going to talk about a workshop or a delivery mode lecture based or you know kinaesthetic where through experience or action by doing.

So, our organization can also you know come with a combined approach maybe it is not you know mandatory that you should only choose one approach or one method of you know learning method you can come up with a combinational of multiple methods can

also be part of a training programme because organization has to keep in mind that yes, everyone learns differently while exploring new training methods.

So, you should also understand yes, my learners are diverse their interest will be different the way they learn the phase at which they learn will be different, but you have to see that how you are going to choose the method that such a way that yes everybody will be able to travel and learn what we are aiming to create that learning among the participants ok.

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The slide is titled "Components of Training Design". It features a yellow box with the following text:

Learning Sequences

It is to determine the sequence and structure of the material to ensure the learning objectives are met. A proper sequence provides the learners with a pattern of relationship so that each activity has a definite purpose.

The more meaningful the content, the easier it is to learn and, consequently, the more effective the instruction.

Handwritten notes on the right side of the slide include:

- A vertical flowchart: L.O^m → L.C → L.N → L.S
- A bracketed section labeled "Analytics" containing:
 - Basic Foundations
 - Theoretical Frameworks
 - Statistical
 - Software Tools
 - Do more...

The NPTEL logo is visible in the bottom left corner.

Then comes the learning sequence. It is to determine the sequence and structure of the material to ensure there is learning objectives are met. Every time when we talk about you know sequencing which again always relate to the learning objective. As we say learning objective L O which is an important factor, which is a precursor, which will drive my learning content, which will drive my learning method, which will drive my learning sequence.

So, I need to design my sequence in such a way that yes, the learners have developing they are developed to achieve these learning objectives and there should be a sequence or a pattern so, that you know they will be able to learn properly. For example, let us say you are training your wanted to develop on analytics conducting a training programme for analytics.

Now, when you want to offer a training programme for analytics, you should also start with some basic foundational aspect right basic and foundation then gradually take them to basics on you know theoretical frameworks. Then what will we do? You will take them to some introduction to statistics and the testing what we do then as they build this foundation then you will expose them to tools ok. You will specifically talk about the tools then you will have them the demonstration ok.

This is how sequencing you are trying to do. So, the sequencing will help to see how you are actually successful in creating the sequence of this particular training content ok. So, this is how it is very important how are you going to sequence it. So, that the training contents are easier to learn and it has a flow my learners are able to learn sequentially that finally, I am able to achieve my learning objective ok.

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The slide is titled "Components of Training Design" in an orange header. Below it, a yellow box contains the text "Learning Sequences: Some considerations". To the right of the yellow box, there is a red handwritten sequence "1-2-3-4-5" with an arrow pointing to the right. The slide also features a small video inset of a man in a light green shirt in the bottom right corner. The background of the slide is white with faint icons of a gear, a DNA helix, and a network diagram. The NPTEL logo is visible in the bottom left corner.

Components of Training Design

Learning Sequences: Some considerations

- Job Performance Order: The learning sequence is the same as the job sequence.
- From Simple to Complex: Objectives may be sequenced in terms of increasing complexity.
- Critical Sequence: Objects are ordered in terms of their relative importance.

1-2-3-4-5 →

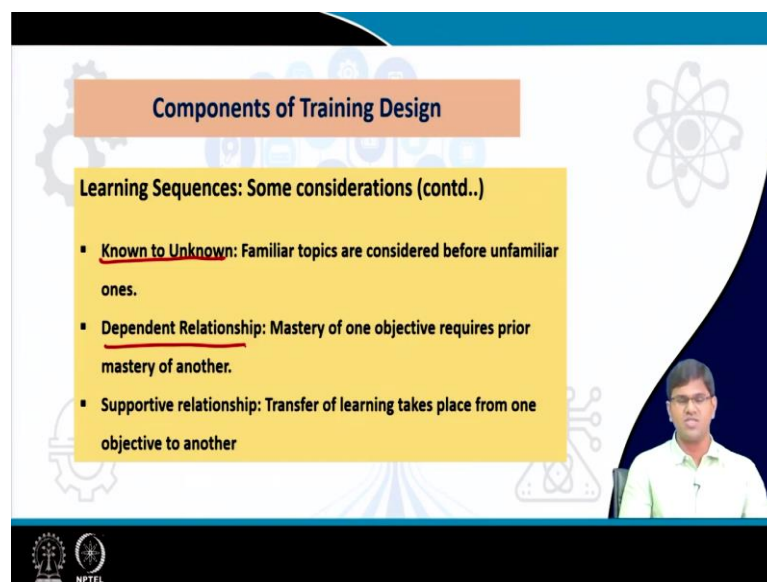
So, some of the consideration we will talk about you know job performance order the learning sequence is the same as the job sequence because maybe sometime you wanted to replicate what my workplace is doing. For example, assembly line; you know assembly line you always have sequence of activity you know very similar 1, 2, 3, 4, 5 this is the sequence.

Does my training programme sequencing also very similar, replicating how does it seem in a workplace and then also similarly simple to complex if you know go back and see

this is how when I said you know example of an analytics training programme, which you know starts with some basic foundation theoretical frameworks.

So, that now you will feel like no yes simple to complex you are just building them from a basic thing and then moving them to the next level, which is a simple to complex and critical sequences object are ordered in terms of relative importance, which is very important which is the you know least important, which are you know, which are stays in the middle of this importance level so, based on that you will be able to sequence the training activities.

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The slide is titled "Components of Training Design" and is part of an NPTEL presentation. It features a yellow box with the heading "Learning Sequences: Some considerations (contd..)" and three bullet points. A small video inset of a presenter is visible in the bottom right corner of the slide area.

- Known to Unknown: Familiar topics are considered before unfamiliar ones.
- Dependent Relationship: Mastery of one objective requires prior mastery of another.
- Supportive relationship: Transfer of learning takes place from one objective to another

And you always start from known to unknown as I was said you know principle of activation. Keep that in mind; yes, if you are starting with a known you know my learners will be comfortable and they become excited engaged then you slowly take them to the unknown or unfamiliar concepts then they will be able to learn and then you will be able to impart that learning on the employees.

Then dependent relationship a mastery of one object requires a prior mastery of another yes as we again if you relate to the same principle of activation, which is going to be a foundation for you to relate this relationship and supportive relationship transfer of learning takes place from one objective to the another. So, these are the sequential in which the training will take place, yes.

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So, now these are the references.

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CONCLUSION

This part of lecture session has given clear picture on the concept, purpose, importance, principles and components of Training design with an aim to make aware all learners about it and enhance their level of thinking and perception on all these aspects of training programme design

Handwritten notes:
"TNA" / Opportunity / Issue / P.D.
↓
Learning Objectives
↓
L.O.B. - "5 days"
3 days
↓
1 L.C
↓
2 L.M
↓
3 Sequencing

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And today we had learnt about training design, what are the principles of training design when we are designing a training programme, what you need to keep in mind and we also talked about some importantly what are the components of training programme training design. So, which started with you know learning objective.

So, learning objective is very fundamental. When we talk about a learning objective where do you drive this learning objective is a critical when we say the learning

objective drives from your training need assessment, which is a you know need assessment you have already done and also probably from an opportunity perspective opportunity available in a market are probably issues which your organization suffering or a performance deficiency which are observed.

This will tell me what is my learning objectives. Once you decide the learning objective with the next component, we are talking about ok learning content what should be my content. So, that I will be able to achieve effectively the learning objectives then comes the learning method and then comes the sequencing. How do I sequence the you know my training programme.

These are the 4 important components of a training design which is very critical. So, you have to make sure that learning objectives are made very sensibly and which has a logical thing and it also ensure that yes learning objectives are attainable in nature. You cannot come up with the learning objectives which are not possible in a specific training model.

For example, you are coming up with a specific learning objective 1 which says you know can be achieved only in 5 days, but whereas, you know your training programme is only for 3 days. So, how do you do it? So, it is very important you are making a learning objective in such a way that yes, which is attainable within your specified training days. So, in the next lectures we will be learning more on how do you effectively implement the programme design in an organizational setup.

Thank you.