

Introduction to Biomimicry
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Lecture – 31
Tools Mind mapping: Week 6 Part 3

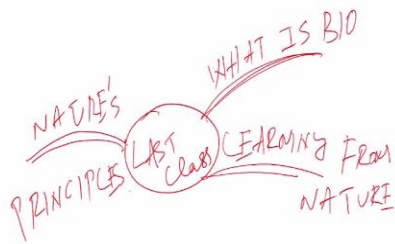
Now, we are going to move into a completely new learning like I said many times you learn the subject, you come here to learn biomimicry, but you also learn connected things because only when you learn the connected thing, the main subject becomes meaningful, becomes strong for you. So, therefore are you ready to learn. I am going to give you at least three or four tools for learning.

Let us start with a very simple tool. I remember it was about I think maybe 10 years, 15 years ago I had to go abroad for some work and during that time I found that there was a workshop on the tool that you are going to learn about now. There was a workshop on something called mind mapping and I grab that opportunity I said I want to learn it and I learned mind mapping.

It was a four-day program, it was a big eye-opener for me because it helped me. You will see what mind mapping can do for you and I want you to maybe at a later point discuss what is mind mapping. So, what we are going to learn now is mind mapping. So, I am going to quickly draw something on the screen. Let us say I want to talk about the last I have not talked about mind mapping yet, but I am going to draw a mind map.

Just watch what I do. I have not talked about mind mapping. I am going to draw a mind map. So, my name is Shiva I want to speak about the last class.

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So, therefore I have done something do not ask me what and I have said what is mind mapping and then I have said learning from nature and then I said now last class we also did nature's principles. I have drawn a mind map just watch what I did. I am sure you watched what I did. I wrote three things on the board. Now, let us see mind mapping. I am going to give you about 5 or 6 pictures of mind mapping.

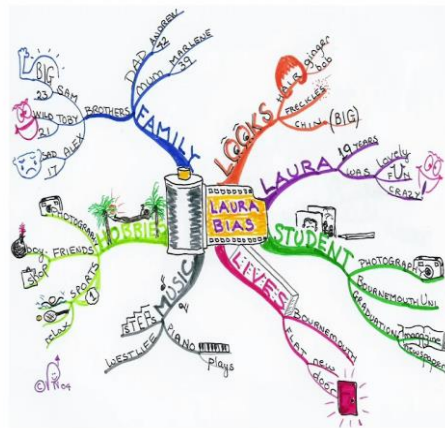
I am going to teach you mind mapping using those pictures and then I am going to ask you to compare my mind map and what you are going to learn and criticize my mind map, tell me everything that is wrong with it including the handwriting. So, let us do mind mapping now.

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So, I am going to show you a mind map you know one of the easiest ways to learn anything is to see it. So, no theory. Just see the next mind map.

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Wow that is the first thing. It is drawn by this brilliant mind mapper called Vanda North. She is genius in mind mapping. You can see how she has signed off her name Vanda North. Now, look at this mind map and I want you to ask answer questions along with me. It is unfortunate I cannot see you, but you know when I ask you a question I want you to quickly take a book and write it down answer the questions.

And then at the end of that all the answers will be what is the mind map about? Question number one what is the subject of the mind map? Many of you I am certain because you are all very intelligent. Many of you will have said that the subjects of the mind map is Laura Bias. So, you will learn the rules of mind mapping by looking at a mind map. So, what is the first rule of mind mapping. What is the first rule?

I am sure you are saying it the first rule of mind mapping is that the subjects of the mind map is at the center of the page that is first rule; rule number one and then what happens? You see how many thick lines are there on this map you cannot make a mistake in this. Yes 7 what are the thick lines? The thick lines are looks, Laura, student, lives, music, hobbies and family. The second rule is draw the thick lines that come to you as it comes to you.

The minute you think about Laura Bias so we are talking about Vanda North. The minutes she thinks about Laura Bias she thinks about Laura Bias's looks. She looks at Laura Bias as Laura herself, Laura Bias as a student where Laura Bias lives, Laura Bias's music, Laura Bias's

hobbies and Laura Bias' family 7 slides, 7 lines. Rule number two draw the thick lines quickly, but you have to name the lines. So, what is the rule about naming the lines?

Where are the lines, where is the word, word is on top of the line. So, rule number 3 write down the words on top of the line. How many words are there? One. So, rule number 4 write down one word only. Now you are all saying Shiva you made a mistake. This is no mistake in mind map. You can do what you want I am just taking the liberty that is all. I am just teaching it to you.

You later on try and find out how it is comfortable for you, there is nothing, there is no tool in the world that you must do this way, this way, this way. You have to take the liberty of what you are comfortable with. So, rule number 4 is that there is only one word no two words and the word is on top of that thick line. So, Laura Bias, looks, Laura student, live, music, hobby, family that is done.

Then what happens what do you see? So, now you are a mind mapper you are thinking about Laura Bias and you say wait I want to talk some more about her looks. So, what you do you draw three thin lines thinner than the thick line which is a sub-description or a description of the main thick line. The thick line is looks and the three thin branches let us name it as a branch the thick branch.

And the three sub-branches are thinner than the main branch. The sub-branches are thinner than the main branch, but they are all the same colour wow. So, therefore look start from the center of the page there is only one word above looks, there is no two words looks is above the line, looks is a thick branch and then branches off into three sub-branches. Now the naming convention is easy.

So, therefore one branch is called the hair of Laura Bias she want to describe. She wants to describe Laura Bias's freckles and chin. Now, she is saying wait, wait it is not enough. I want to make more of a description of hair. I want to talk about Laura Bias, I want to talk about Laura Bias's looks, I want to talk about Laura Bias's hair how it looks, but I want to talk more about hair.

And therefore what do you have two thinner branches can I say sub-branch, sub-sub branch, what do I do I write ginger because why because the colour of her hair is ginger I wanted to say it, I want to say it I do not want to leave it because that is what it will complete my thinking. So, I say ginger and I say bob cut that is the style of the hair.

Now, it is apparent look with just one line you have learned mind nothing. Laura Bias the main subject of the mind map in the center of the page thick branch emanating from the center which is the looks, which is of one colour sub-branch emanating from the thick branch same color, sub-branch emanating from the sub branch different same colour, but description that is it.

So, therefore looks, hair, ginger, bob and then freckles I just want to do now, what the mind mapper wants to do? The mind mapper is now imaginative using the imagination and say I want to actually show freckles, but I am not allowed to draw anything else, I am not allowed to say more than one line so what do I do? If you are not allowed to say more than one word what do I draw.

Look how she has drawn the freckles of the small, small spots on the cheek so she has got freckles and then look at the chin what is Laura Bias's chin how big, small medium what is it big chin. So, big depicting bigness, largeness and it is in brackets big in big capital letter shouting the chin is actually shouting to you saying oh I have a big chin and that is one branch of Laura Bias what have you learned if you had to write this, you have to write paragraph.

So, boring today are you bored with this mind map? No. So, let us see the rest of the mind map it is very easy now. Laura Bias about Laura sub, sub-branch 19 years was not anymore was lovely, fun, crazy and look at how crazy it has been depicted beautiful right just beautiful and then she was a student of photography. She is from the Bournemouth University. She has graduated in magazine and newspapers.

Now, start reading the mind map it is so easy. Where does she live? Lives main branch lives in Bournemouth. She lives in a flat with a new you want to say red, but you cannot say red door it is not allowed. So, you said door and you paint the door, you draw the door and paint it red. Is this red or pink it does not matter whatever colour you see and then music what music she plays the steps music I do not know what it is I hope I can.

I can learn it someday west life music and she plays the piano look at the beauty of the piano there so beautifully it is drawn. You know after this you will want to learn sketching, you will want to learn drawing. Unfortunately, that has been the huge problem in my life I am very weak at drawing, but I still want to draw, but I still do not know how to draw maybe some of you here please send me a mind map please.

It would be nice to see many of your mind maps what you do and her hobbies are photography, shopping with boyfriend, look at sports what is Laura Bias? Laura Bias is very good in three sports and she comes first depicted by number one over here. She is good in swimming, in tennis and any sport that relaxes her and then of course family. This one when I teach mind mapping this is the most popular branch because all of us love to speak about our family.

So, look at this family dad seems to be little young 42 years. So, dad his name is Andrew, his age is 42, mom is Marlene 39. Sam has got big muscles therefore the muscles are being depicted as big muscles. So, Toby is wild 21, Alex is sad and 17. Exercise for you. Let us see you close your eyes for a minute, test, do not open your eyes, test, what is Laura Bias's hair colour?

If you say ginger you are right and it also tells you that when you use pictures your memory is much better. So, what are the advantages of mind mapping is mind mapping helps you to remember things. That is the use of mind mapping. The use of mind mapping is mind mapping helps you to remember things. So, that is the first mind map that you probably have seen in your life.

If many of you who have already done mind mapping try and find out what you can learn from this mind map, but now what we will do we will look at examples that is all. Now you are all mind mapper it is easy. Before you draw the first mind map of your life let us see about 5 or 6 examples of mind mapping. We saw all the rules how many rules. There could be more rules I may not have covered all the rules, but that does not matter.

See I do not believe in giving you all the rules. It is not right, do you come up with a rule and write to me saying Shiva there is one more rule. Right now what are the rules, what are the basic rules. Rule number 1 the subject of the mind map is the center of the page. Rule number two: think of the main branches first, draw the main branch. Three: put the name of the branch above the branch.

You can have sub-branch of the main branch, but same colour thinner very good then you can have sub-branch of the sub-branches same colour, but thinner very good. You can have as many sub-branches as you want. You cannot do more than two words on a line therefore you draw lots and lots of pictures basic rules and now once you start there are lot of books on mind mapping and once you start Tony Buzan.

Tony Buzan is credited. We must talk about Tony Buzan. Tony Buzan is the one who started mind mapping he has written some great books on mind mapping. There is also a software for many of you who want to use software just go to I think mindjet.com or something like that, look it up and you can find out whether you can do mind map digitally without having to draw. For me I am always comfortable drawing. So, let us some more mind map just to help you understand mind map.

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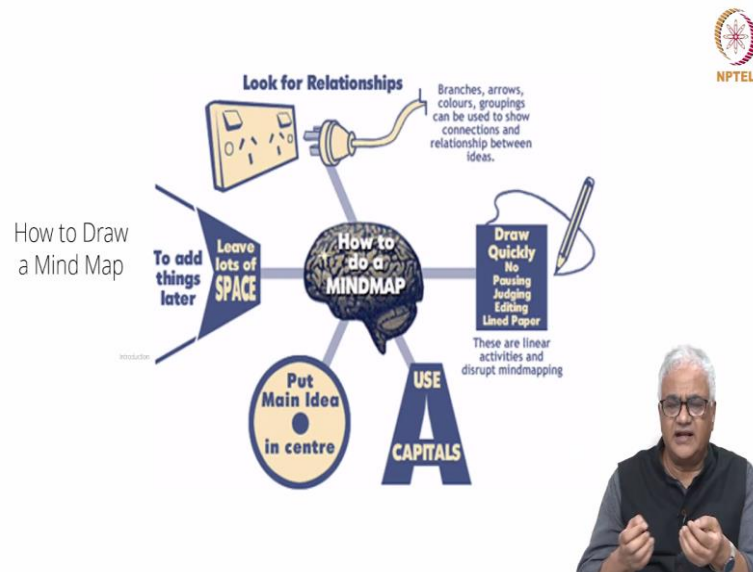


Look at this mind map. Laws of mind mapping. What we learned right. So, therefore landscape I forgot so hold the paper in landscape mode, start with a blank paper, the center of the page, the center lines all these are rules just keep it with you. I am not going to each and everyone these are all the rules you may discover some new rules in this. Find out if it is adopting we have learned the mind map in a very simple way.

So, it is always nice to learn it simple way and then look at the more complicated stuff. My job is to help you learn mind mapping, start you off on the journey of mind mapping. So, now as I

am speaking to you start writing what you remember. Look at this presentation once more, look at the beauty of the presentation again drawn by Vanda North.

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So, this is how to draw a mind map. So these are all rules get thick, rules get more and more deeper, draw quickly, use capitals all these are extra rules anything to help you understand mind mapping in a better way.

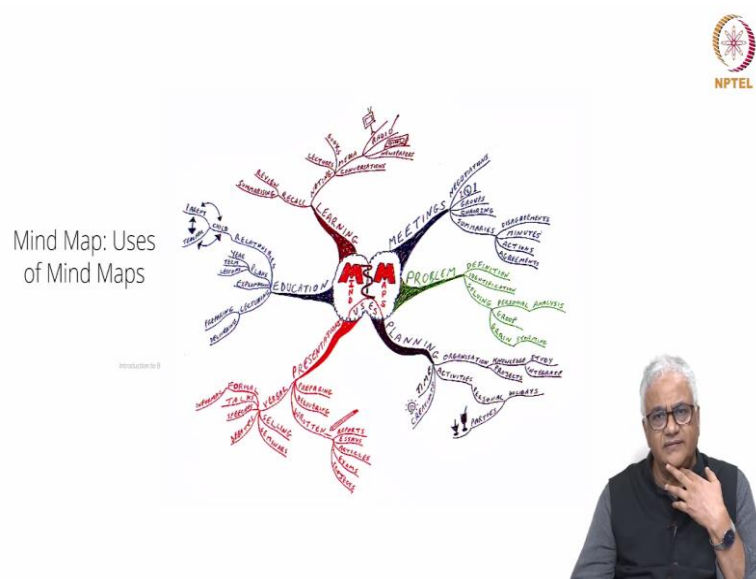
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Look at this is drawn by a kid look at the way he has drawn mind map. So, he wants to do scalar quantity done by a student in a school and he is saying he has depicted length, temperature, charge, pressure, frequency everything beautiful picture everything scalar quantities is depicted by speed, time, volume everything. Look at the picture I think this mind map the merit is in the pictures the kid has used.

And how pictures they say speak 1,000 words. So, depicting length in picture, depicting temperature by picture etcetera. So, here the drawing skills of that kid really come forth.

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So, these are uses of mind map. You can use it for learning, you can use it for meetings. So, when a meeting is going on only thing you remember to tell the person who is conducting the meeting saying I am drawing a mind map. Actually one what happened was I think I do not know about 10 years ago when I was in TCS I had learned mind mapping and there was this man speaking it was a very important speech.

And I wanted to impress that person who are speaking. So, I told him see I am going to be writing something. I am not distracted I am writing something about your speeches. So, at the end of that speech I actually drew a mind map of a speech and gave it to him. He was so happy because he looked at the mind map and he knew what all he had spoken. You can use the mind map to go through the process of a problem definition, identification solving, personal.

So, whatever you want to do about a problem we can put a mind map you say problem that I have and analyze the problem using mind maps. You can use it to plan. Many people use mind map for shopping because you tend to forget things while shopping. So, therefore people use mind maps. Presentation. This is where I found look I already I think I made one full slide without anything on a slide using the mind map about 10 minutes, 15 minutes ago.

So, you can use it as representation, you can also use this to remember things. Suppose, you watch the movie you want to remember the movie after about 5 years, 10 years all you come back and do is put the name of the movie and you put the branches and you store it somewhere 10 years later you pick it up you are able to connect the words. So, that is what should I say the technique behind mind map that the connections.

The words help you to connect and when you read Tony Buzan you will find more of how the brain functions and all that which is not what I am going to explain here. I just want you to become a mind mapper and then many of you who is interested can go deep into mind mapping, find out how it works, the functions of the mind, how the brain works, what is the connection between doing those lines in that particular order.

And the brain and all that. That is for you to learn on your own and so you can also do mind map, for instance, suppose you learn about oxygen, and then you put oxygen in the center of the page, you draw the branches and all that and then you learn it. One day before the exam you can pick up the whole thing, you can pick up your mind map of oxygen which you did about two months ago and suddenly you start to remember everything about oxygen.

The problems about oxygen, the good things about oxygen, the information of oxygen everything you got and supposing when you go to the exam you get a question about oxygen. You can quickly take a rough page and you can quickly draw mind map of oxygen and use that mind map to write an essay on oxygen. See how easy it becomes. Therefore what is mind mapping? If you have to describe mind mapping what will you describe it as?

Go back to the oxygen example what does it help you do remember that is right remember, memorize. So, to remember things you use mind mapping.

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Mind Map:
Retirement
Speech

So, let us look at the next slide look at this and this is the speech by someone in the office and from now on if you have to make a speech you should volunteer. I am going to make the speech why because you have the mind map in front of you. So, apparently Joe is retiring and someone wants to make a speech and the person who wrote the mind map saying I want to make a speech for Joe.

So, therefore what does he do? Look at the branches he has drawn the main branches are retiring, career, success and toast only four branches. Therefore, there is no rule you do not have to draw oh Shiva told us 7 branches no you can draw one branch, you have got 20 branches, 100 branches there is no limit. Here, there are four main branches. So, retiring so therefore okay let me make a speech.

Ladies and gentlemen today Joe is retiring. He has been in this company for 32 years and this is a sad day for all of us. His career has been very varied career, he started as a team member, but extremely popular. Every staff in the office felt welcome by him. He always supported his colleagues and he was always helping with lot of advice and his shoulder was always available to cry on and then his success is because of his professionalism.

And he is very efficient in finance and he is going to be surely missed. So, let us all raise a toast to Joe, to honor Joe and we wish that Joe has a great retired life. How is that speech? Brilliant not because of me, but because of the mind map. So, next time you have to make a speech, make a presentation instead of boring 20, 30 slides try and do it in one mind map. One of our

students she actually made a mind map during an interview because instead of slides and she actually was selected because it is a very nice, creative way of presenting things.

The only challenge is drawing. So, what you have learned is mind maps and I wish from now on every time you learn something, you quickly take a piece of paper and you do a quick mind map. Do a mind map of the entire biomimicry course and post it to us and you will see how powerful it is right when you are teaching, when you are learning mind maps. Do not forget if you want more information on mind maps go to Tony Buzan.

Any of his books will give you much more information on mind maps. Important tool because now you know a new tool for learning something, for remembering something. So, I hope I get to see lots and lots of mind maps from you.