



Mind-Mapping

Design Thinking & Innovation Tools







Section: T2, Week 2



Design Thinking & Innovation (DT&I)

Section: T2.0

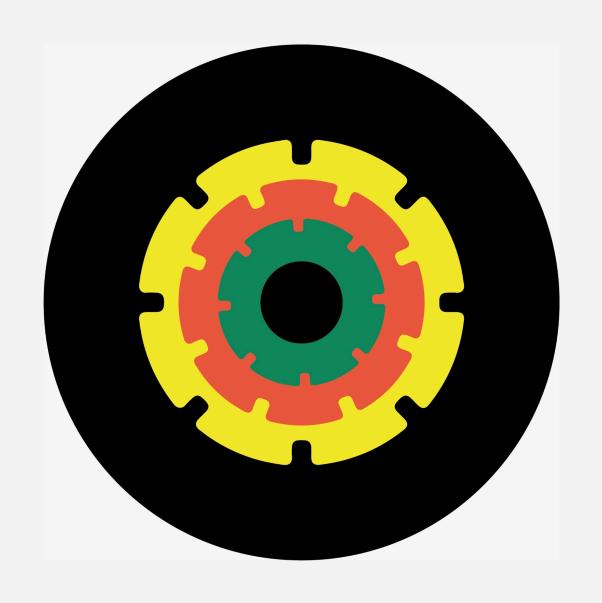
Week 2



Design Thinking & Innovation (DT&I)

Prof. Ravi Poovaiah

IDC School of Design, IIT Bombay



DT&I Tools

T2 Mindmapping

Module T1:











What is Mindmapping?

Mindmapping is a simple creative thinking technique that helps you **identify and** discover the components or ideas associated with the topic/theme topic/problem that you are trying to solve.

Mindmaps show how the components are connected/linked to the main topic/theme as categories and sub-categories.

Mindmaps give a worldview/overview of the problem space.

Mindmapping could be used at different phases of the design process: - to understand the topic, to get a worldview, to generate ideas, to find alternate solutions, to compare feedback, and to link components of the system.



Mind-Mapping:



Individually or in groups?





Mindmapping can be done individually or in a group.

It can be even done with large number of participants (30 to 60) with a facilitator for moderating the session and scribes for drawing the mindmap that can be seen by the whole group.

Mindmapping is most effective when done in groups with people from diverse backgrounds and opinions are involved.

The size of the space needed to do increases with the number of participants. A4 size is fine for an individual, A3 size for a small group of participants and a large board or projection screen for large number of participants.





Steps in Mindmapping:



1. Draw the main theme in the centre (recommended as keywords expressing the main topic/problem clearly)



2. Brain-storm for key-words as branches and sub-branches of the theme (as scribbles, in bubbles, online using Miro/Figma, etc.)



3. Connect the keywords (with lines) as branches of the central theme



4. Use colour code for differentiating categories, thickness or weight for showing hierarchy and arrow-heads to show direction



5. Make use of images/icons to make information visible



6. At least Three levels of branching is required to show the topic in depth



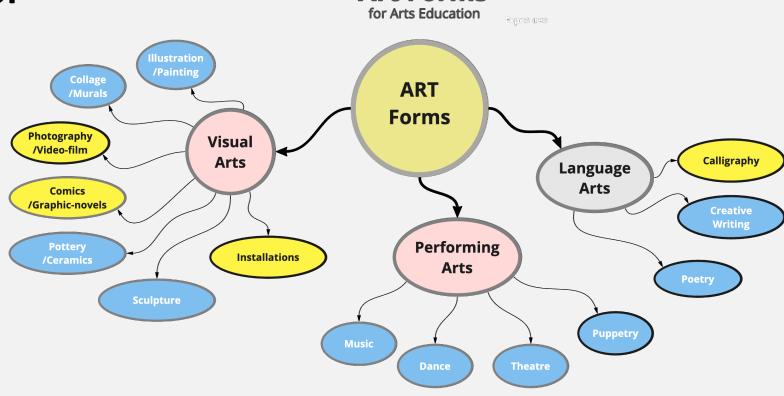


Mindmapping for topic:

Art Forms

Example from a
Mindmapping session for understanding the topic 'Art Forms' to be learnt in schools.

Shown are 2 levels of categories and with the use of colours to differentiate categories - the ones in grey colour are not yet to be introduced in schools



Art Forms



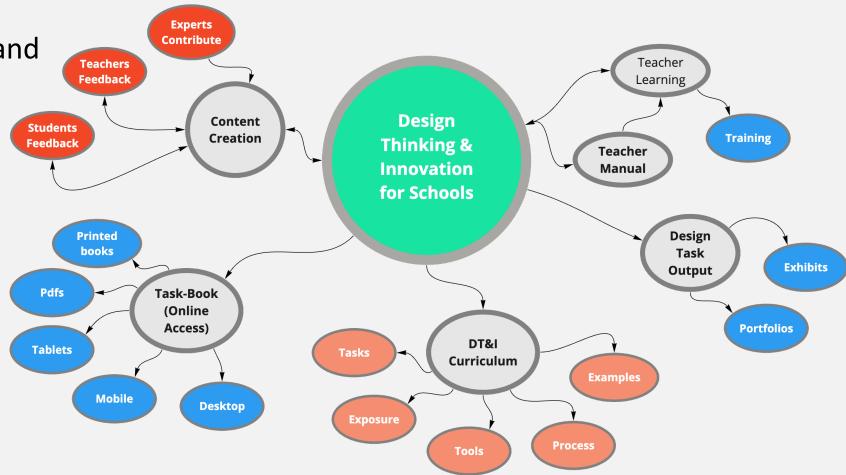


Mindmap:

Design Thinking and Innovation

Curriculum for Schools

Shown are 2 levels of categories with the use of colours to differentiate categories and lines with arrows to show directions





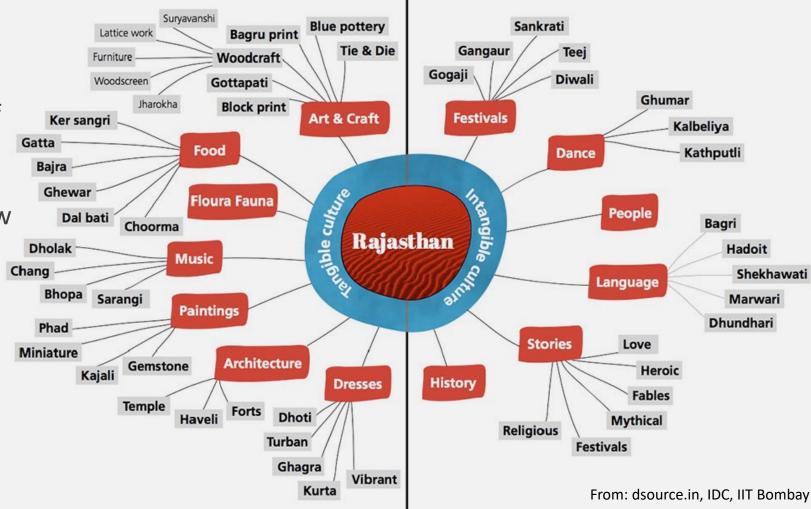


Mindmap:

Here is an example of Mind-map exploring the cultural diversity of the state of Rajasthan and its people.

It gives one an overview of all the aspects connected to the culture of Rajasthan.

Shown are 2 levels/branches or categories



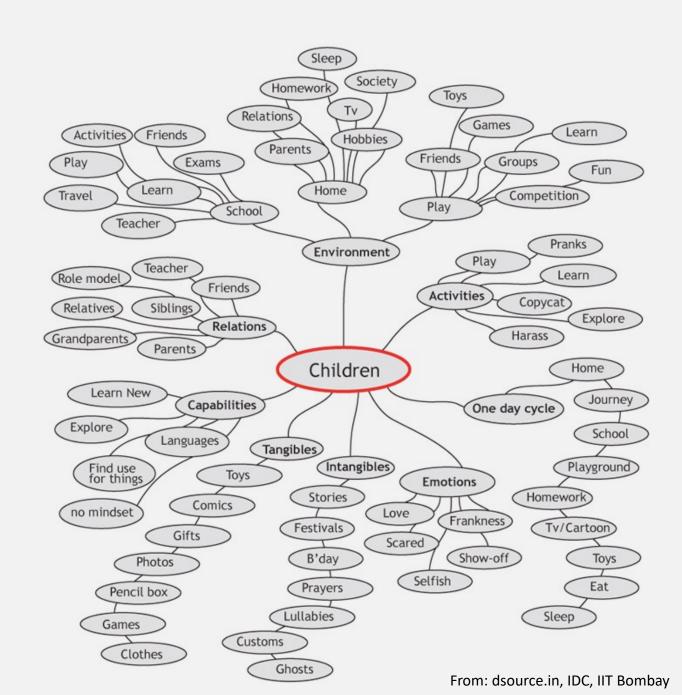




Mindmap:

gives a Overview of Children's environment and their World

Shown are 2 levels/branches or categories







Mindmap:

Mindmap of
Singapore done by
school students at
SIM University,
Singapore

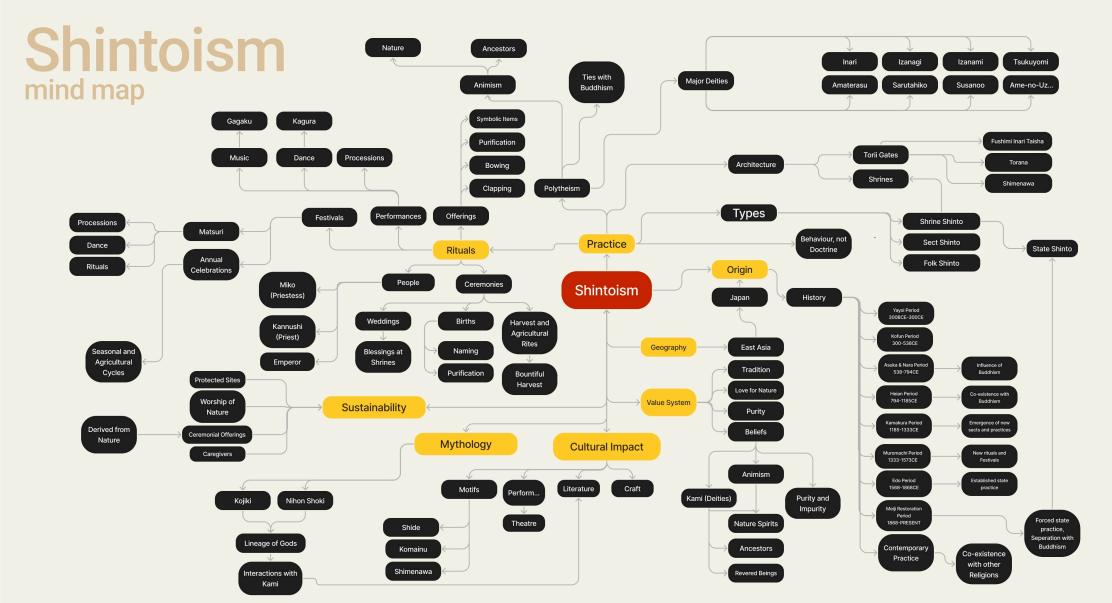
Shown are 3 levels/branches or categories



Mindmap of the Shintoism shown with 3 branches/levels





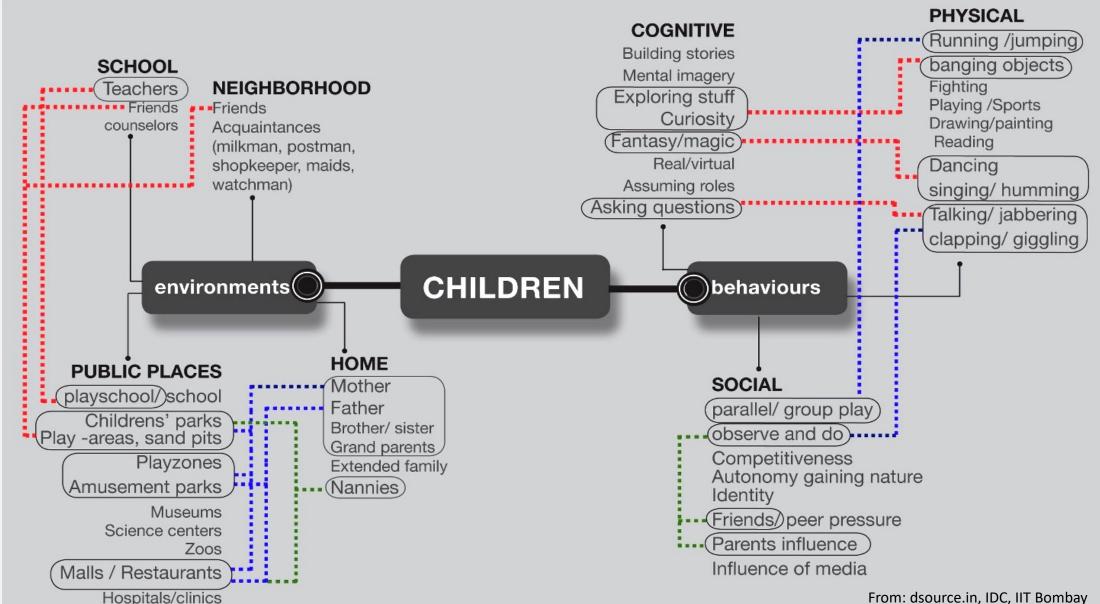


Mindmapping + Affinity Links:

Mindmap of Children' shown with 2 branches/levels with Affinity Links









Mindmapping for Worldview of your topic:



Key-words, Categorizing, linking:

In this exercise, Mindmapping is used to find the components and parts of your topic, link them with branches, and get an overall worldview of your topic.

Mindmapping can again be used as a **technique to generate alternate ideas** at the Ideation phase of the project.





Person behind Mind-Mapping:

Tony Buzan:

Tony Buzan (1942-2019) coined the term 'Mind mapping'.

According to Buzan,

"Mind mapping is a technique based on memory and creativity and comprehension and understanding, so when the student or a child uses the mind map, they are using their brain in the way their brain was designed to be used, and so the mind helps them in all learning and cognitive skills. It simply helps them in what the brain does naturally".





DT&I Tools

Section: T2

Week 2



DT&I Course – Week 2:



DT&I
Process
(20%)

- > What, Who, How
- > Models of DT&I



DT&I
Tools
(20%)

> Mind-Maps + Affinity Links



DT&I Project (50%)

> Finalize Topic
for DT&I project +
Do Mind-Mapping



DT&I Case Study (10%)

Case StudyProject Smaran



Presented by:

Prof. Ravi Poovaiah







Open Design School

D'source Project

MoE's Innovation Cell



Camera & Editing:

Santosh Sonawane







Open Design School



Think Design Animation: Rajiv Sarkar







Open Design School

MoE's Innovation Cell



Graphic Icons:

Shweta Pathare



D'source Project





Open Design School

MoE's Innovation Cell



End Title Music:

C P Narayan







Open Design School

MoE's Innovation Cell



Produced by:
IDC School of Design
IIT Bombay



D'source Project





Open Design School

MoE's Innovation Cell