Mind Mapping – The Power of Related vs Unrelated Stimuli

Introduction

This exercise is used to engage students in any discipline to learn how to be more innovative. It comes from a program on Innovation Engineering but a similar structure has been used in other creativity and business classes. While mind mapping is not a new concept, this exercise highlights the differences between free associating against related versus unrelated stimuli and the difference between mind mapping and the more traditional idea generation technique of brainstorming.

Theoretical Foundation/Teaching Implications

Davies (2011) outlines several knowledge mapping techniques including different methods of mind mapping. He discusses the benefits of such activities to students. These benefits include allowing meaningful learning to occur, allowing new ideas to build on existing knowledge, and allowing students to use active engagement to build new and meaningful knowledge. This session will teach participants how to effectively do a mind map to help students come up with creative ideas. The session offers an enhancement to typical mind mapping exercises in that we will demonstrate the power of using related versus unrelated stimuli to help engage students and encourage out-of-the-box thinking.

Learning Objectives

The purpose of this session is to provide participants with an alternative to brainstorming for coming up with new ideas. During the session, we will discuss the advantages and disadvantages of brainstorming and introduce the power of mind mapping as an alternative. Incorporated within the mind mapping exercise is free associating against related and unrelated stimuli. Once completing the exercise, participants will easily be able to see that free associating against unrelated stimuli results in far more creative ideas than when going against related stimuli. The mind mapping process itself results in ideas that are more numerous and more creative than when trying to develop ideas in the traditional ways.

In particular, learning objectives include the following:

- ***Learning to do a mind map*** – participants will learn how to easily do a mind map with future students.
- ***Understanding the power of related versus unrelated stimuli*** – participants will see the differences in outcomes related free associating against related stimuli versus free associating against unrelated stimuli.
- ***Understanding the differences, advantages and disadvantages of brainstorming versus mind mapping*** – Participants will leave with a better understanding of the advantages and disadvantages of brainstorming and what advantages mind mapping might have to offer in idea generation.

This exercise can be used in organizational behavior classes, innovation classes, or entrepreneurship classes when discussing idea generation. The exercise can be used at the undergraduate, graduate, or executive education levels.

Exercise Overview

In this exercise, we will first review brainstorming and then describe the concept of Mind Mapping and how it provides an advantage of typical brainstorming activities. Attendees will be split into teams consisting of approximately four people each. Each team will be given a large piece of blank paper on which they will be doing their mind map. They will be asked to first free associate with two topics that are related to the outcome of coming up with ideas for a new playground. They will then be given two topics that are unrelated to playgrounds to free associate against. Once they have

taken some time to come up with free associations, they will be asked to use the words they came up with to come up with ideas for the new playground. This process should lead to some unique and interesting ideas.

At the end of the session we will discuss the differences between brainstorming and mind mapping and the differences participants noticed when free-associating against related and unrelated stimuli. Participants will be able to see that although brainstorming has been touted as a great way to come up with new and interesting ideas in the workplace, the mind mapping process results in far more ideas. Furthermore, when comparing free associations against related versus unrelated stimuli, the free associations against unrelated stimuli result in far more creative ideas.

This session is best for a one hour time slot. A variation of this exercise would be to instruct the participants to first do a brainstorming session to come up with new playground ideas. This would take about ten extra minutes at the beginning of the session but would allow participants to more clearly see the differences between the idea generating activities.

Session Description

The process will go as follows:

1. Participants will be divided into teams of approximately four people. – 2 mins
2. Each team will be given a large 11x14 piece of paper. – 2 mins
3. We will discuss the benefits and drawbacks of brainstorming. – 5 mins
4. They will be shown a picture of what a mind map looks like. – 1 min
5. Instruct participants that we will be doing a mind map to come up with new ideas for unique playground ideas. – 1 min
6. As a team they will first free associate against two ideas that are related to playgrounds – disabilities and education. 5 mins.
7. As a team they will then free associate against two ideas that are unrelated to playgrounds – zoos and airplanes 5 mins
8. Teams will then be asked to use the ideas and words that came up during the free association period to come up with ideas for new playground equipment. They should get as creative as possible and come up with as many ideas as possible. 2 mins.
9. Share ideas with the class. 5 mins
   Discuss:
10. What are the differences in the outcomes when free associating against related vs unrelated stimuli? 5 mins
11. What are the differences in the outcomes when doing a mind map this way vs brainstorming? 5 mins
12. Discuss with participants that the free associating will result in more ideas. Free associating against ideas that are unrelated will help the team come up with ideas that are far more creative. 5 mins.

References

Davies, M. (2011). *Concept mapping, mind mapping and argument mapping: What are the differences and do they matter?* Higher Education 62:279-301.