

**Challenges of Education in the 21st Century**  
**Sub Theme: Educational Methodologies**  
**Effect of Mind Mapping Technique on B.Ed Student- Teachers**

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**ABSTRACT**

*Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits. Educational methods include teaching, training, storytelling, discussion and directed research. A mind map is a graphical way to represent ideas and concepts. It is a visual thinking tool that helps structuring information, helping you to better analyze, comprehend, synthesize, recall and generate new ideas.*

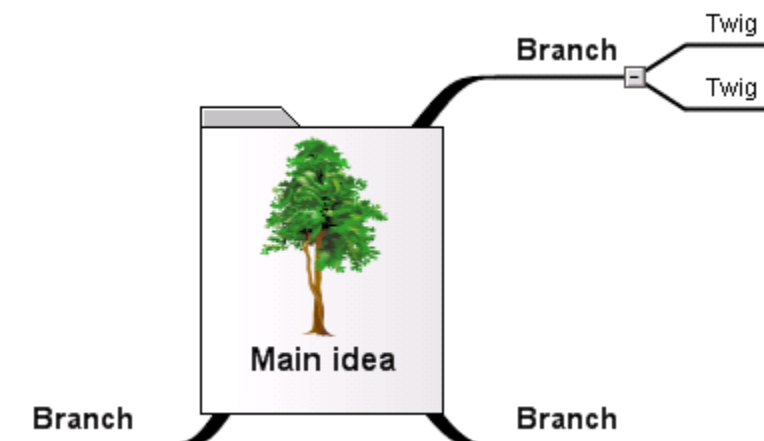
*The aim of this paper is to compare the effect of mind mapping technique and traditional teaching methods in the subject Creating an Inclusive School. For this study 30 B.Ed student -teachers were selected. They were randomly distributed into two groups. The teaching method used for experimental group was mind mapping and traditional method for control group. Pre-test and post-test equivalent group design was used. Findings showed that significant difference was found in B.Ed student - teachers achievement through mind mapping technique for the subject of creating an inclusive school.*

*Keywords: Mind mapping, student- teachers, achievement.*

**INTRODUCTION**

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits. Educational methods include teaching, training, storytelling, discussion and directed research. Education frequently takes place under the guidance of educators, however learners can also educate themselves. Education can take place in formal or informal settings and any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. The chief aim of Education is to help students to have desirable changes and new way of thinking. Education aims at shaping the behaviour of the students in a desirable way and bringing about all round development in their personality. The task is carried out through the process of formal and informal learning.

A mind map is a graphical way to represent ideas and concepts. It is a visual thinking tool that helps structuring information, helping you to better analyze, comprehend, synthesize, recall and generate new ideas. Just as in every great idea, its power lies in its simplicity. In a mind map, as opposed to traditional note taking or a linear text, information is structured in a way that resembles much more closely how your brain actually works. This technique was developed by the UK researcher Tony Buzan in his 1972 book 'Use Your Head,' mind mapping is used in note taking, brainstorming, problem solving, and project planning. Like other mapping techniques its purpose is to focus attention, and to capture and frame knowledge to facilitate the sharing of ideas and concepts.



### **CHARACTERISTICS OF MIND MAPPING**

1. The main idea, subject or focus is crystallized in a central image.
2. The main themes radiate from the central image as 'branches'
3. The branches comprise a key image or key word drawn or printed on its associated line.
4. Topics of lesser importance are represented as 'twigs' of the relevant branch.
5. The branches form a connected nodal structure.

### **OBJECTIVE OF THE STUDY**

To study the effect of Mind Mapping technique on achievements of B.Ed student -teachers in the subject of Creating an Inclusive School.

### **HYPOTHESIS OF THE STUDY**

There is no significant difference existing in the teaching through mind mapping and traditional teaching in the subject of creating an inclusive school.

### **DESIGN AND METHODOLOGY**

The investigator adopted the pre-test, post- test equivalent groups design for the present study.

### **SAMPLE**

Sample consisted of 30 B.Ed student- teachers studying the subject creating an inclusive school in Seva Sadan's college, Ulhasnagar. 15 B.Ed student teachers were selected as experimental group and 15 for the control group.

### **TOOL USED**

The investigator constructed and validated an achievement test in the subject Creating an Inclusive School on the topics Barriers and facilitators of inclusion, Use of ICT in inclusive classroom and individualized educational plan. Lesson plans based on the above mentioned topics for experimental group based on mind mapping technique for control group based on traditional method.

### **STATISTICAL TECHNIQUES**

Statistical Techniques used were mean, standard deviation and t-test for independent sample.

### **TREATMENT**

To analyse the effect of mind mapping in the subject Creating an Inclusive School. Two target groups were selected and given different patterns. 30 B.Ed teachers were divided as an experimental group (N=15) and control group (N=15). The experimental group was taught using mind mapping technique and control group with traditional method of teaching. The topics selected were Barriers and facilitators of inclusion, Use of

ICT in inclusive classroom and individualized educational plan. Before and after treatment, an achievement test developed by an investigator was administered to find the significant increase in knowledge.

### DATA ANALYSIS

The collected data was analysed and tabulated as follows

**Table-1: Test of significance of difference between the mean scores of pre-test of control and experimental group.**

| Group        | N  | Mean | S.D. | t value (calculated) |
|--------------|----|------|------|----------------------|
| Control      | 15 | 8.13 | 1.79 | 0.44                 |
| Experimental | 15 | 8.67 | 3.31 |                      |

**Interpretation:** There is no significant difference in achievement of subject Creating an Inclusive School between the control group and experimental group before giving the treatment.

**Table-2: Test of significance of difference between the mean scores of post-test of control and experimental group.**

| Group        | N  | Mean  | S.D. | t value (calculated) |
|--------------|----|-------|------|----------------------|
| Control      | 15 | 16.60 | 4.43 | 3.78                 |
| Experimental | 15 | 16.73 | 4.00 |                      |

**Interpretation:** There is a significant difference at 0.01 and 0.05 level in achievement of subject Creating an Inclusive School between the control group and experimental group after giving the treatment.

### FINDINGS

- There is no significant difference in achievement of subject Creating an Inclusive School between the control group and experimental group before giving the treatment.
- There is a significant difference found in achievement of subject Creating an Inclusive School between the control group and experimental group after giving the treatment.

### CONCLUSION

Use of mind mapping technique was found significant and effective in teaching of subject Creating an Inclusive School. Student -teachers found it interesting and gained the concepts very easily.

### EDUCATIONAL IMPLICATIONS

- This technique strengthens teachers own subject area knowledge and metacognitive skills.
- Mind mapping technique helps to reduce students boredom attitude and enhance creative thinking and achievement.
- Mind mapping technique makes teaching learning interesting.

### REFERENCES

- Buch, M.B., Third & Fourth Survey of Research in Education Society for Education Research and Development, | Barodra. 1973-78, 1983-88.
- Brinkmann, A. (2003). ' Graphical Knowledge Display - Mind mapping and Concept- Mapping as Efficient Tools in Mathematics Education ', Mathematics Education Review, The Journal of the Association of Mathematics Education Teachers, 16, 39-48.
- Buzan, T.(1974). Using both sides of your brain. New York: E. P. Dutton

- Edge, C.(2006). "Mind mapping: it's effects on student achievement in high school biology "
- Garret Henry ,Education and Psychology Statistic. |
- <http://www.businessdictionary.com/definition/mind-mapping.html>
- <https://litemind.com/what-is-mind-mapping>
- <http://www.businessdictionary.com/definition/mind-mapping.html>