Usage of Memory Model of Teaching And Mnemonics in Teaching-Learning of Psychology at B.Ed. Level

J. M. Maheswari
Assistant Professor, Bharathi College of Education, Yuva Enclave, Somayampalayam Post, Coimbatore-641108

ABSTRACT

B.Ed. is a course where the teachers of the core papers such as philosophy and psychology would find the student-teachers with a myriad of individual difference ranging from various academic backgrounds to different age groups. The stale traditional method would not meet the needs of this diverse group of learners. A participatory, novel and interesting method of teaching is the need of the hour. The present study has attempted to rejuvenate teaching-learning process by following memory model of teaching and applying mnemonics technique in its phases to reinforce the same. The present study used the memory model with mnemonics technique in the teaching of psychology paper at B.Ed. level. The objectives were i) To try out and find the applicability and the acceptability of the memory model among the student-teachers ii) To acquaint the students with mnemonics techniques and figure out the popularly used techniques for learning psychology iii) To measure the attitude of the student-teachers towards memory model of teaching and mnemonics techniques. Convenience sampling and experimental method with one-shot case study design were used. The study was conducted on 40 B.Ed. student-teachers who had selected English as their medium of instruction for a period of 1 month. The student-teachers responded and eagerly accepted the new method and came up with name mnemonics, word mnemonics, note organisation mnemonics etc. Everyone strongly agreed that the new method was participatory. 38 student-teachers strongly agreed that the method was interesting and useful. 36 student-teachers were willing to follow the same method when they become full-fledged teachers.

Introduction

One of the most commonly described problems of the B.Ed. students is remembering various theories in the psychology paper. This paper is taught mostly through traditional method of teaching emphasising teacher-centred approach without any room for interaction. B.Ed. class has unique individual difference i.e. the students, academic back ground ranges from arts and history to biological science and computer science. The students also belong to different age groups, with or without teaching experience. The onus is on the psychology teacher to make the students - literature, mathematics, biological science, physical science, computer science, commerce and history students - understand the concepts and theories of psychology clearly. When traditional method of teaching is followed, they get bored and lose interest in learning since there is no participation. But, a psychology teacher can bring a change by arranging the learning environments and providing tasks that generate enthusiasm to learn psychology.

Model of Teaching

A model of teaching is a description of a learning environment. The description has many uses ranging from planning curricula, courses, units and lessons to designing instructional materials-books, worksheets, multimedia programmes and Computer Assisted Programmes.

Memory Model of Teaching

Memory model of teaching developed from the work of Pressley, Lenin and their associates includes four phases: Attending to the material, Developing connections, Expanding sensory images and Practising recall. These phases are based on the principle of attention and the techniques for enhancing recall.

Mnemonics

Mnemonics are often called mnemonics or mnemonic techniques and they date back thousands of years (Yates, 1966). Mnemonics are considered cognitive strategies (Brown H.D., 2007) but unfortunately they fell into disuse nowadays. Mnemonics include simple techniques such as acronyms as well as complex methods such as the loci, the key word and the peg method.

Formulation

The students are acquainted with the phases of memory model of teaching and taught the various mnemonics techniques. The four phases of memory model of teaching are:

- **Phase 1: Developing Connections**
  - Use of techniques of undervaluing, listing, reflecting etc.

- **Phase 2: Attending to the Material**
  - Make material familiar and develop connections using key word, substitute word link word etc.

- **Phase 3: Expanding Sensory Images**
  - Use of techniques of ridiculous association and exaggeration

- **Phase 4: Practising Recall**
  - Practice recalling the material until it is completely learned

For the phases 1 to 3, the students were asked to use any one or more of the following techniques of mnemonics:

1. **Name mnemonic:**
   - In a Name Mnemonic, the 1st letter of each word in a list of items is used to make a name of a person or thing. Sometimes, the items can be rearranged to form a more recollectable name mnemonic. Example: VIBGYOR = Violet, Indigo, Blue, Green, Yellow, Orange, Red
2. Word or Expression mnemonic:
The first letter of each item in a list is arranged to form a phrase or word in expression mnemonic. Example: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, and Pluto =: My, Very, Educated, Mother, Just, Showed, Us, Nine, Planets

3. Model Mnemonics
In a Model Mnemonic, some type of representation is constructed to help with understanding and recalling important information. Examples include a circular sequence model, a pyramid model of stages, a pie chart, and a 5-box sequence. Models should be used in addition to words and lists because they make recall at test time much easier.

4. Note Organization Mnemonics
The organization of notes can promote recall. Examples of organizing note formats that promote recall are as follows: i) Notecards: Here, main ideas are formatted into possible test questions. ii) Outlines: Outlines clearly separate main ideas from details. This helps organize the information in the mind making it easier to remember. Example: i) Vertebrates - a. Pisces b. Amphibians c. Reptiles d. Aves e. Mammals

5. Image Mnemonics
The information in an Image Mnemonic is constructed in the form of a picture that promotes recall of information when you need it. The sillier the Image Mnemonic is, the easier it is to recall the related information. These images may be mental or sketched into text and lecture notes.

6. Connection Mnemonics
In this type of mnemonic, the information to be remembered is connected to something already known.

Methodology
Convenience sampling was followed. Experimental method with one-shot case study design was adopted since this is an exploratory research. The study was conducted on 40 B.Ed. students who had selected English as their medium of instruction in B.Ed. for a period of 1 month. Selected topics namely theories of cognitive development, theories of learning and theories of intelligence were taught to the group using memory model of teaching. The students were acquainted with mnemonic techniques and were asked to use them in the phases of memory model. An analysis of the popularly used mnemonic techniques was done. A self-constructed tool was administered to measure the attitude of the students towards Memory model of teaching and mnemonic techniques. The tool had 5 positive items with Likert scale. Any individual having a score from 15 to 20 is considered to have a positive attitude towards the intervention.

Results
Only 10% (4 students) had known the usage of mnemonic technique before the intervention. After acquainting all with this technique 100% of the students agreed to follow the same for teaching-learning.

Table 1: Mnemonic Techniques used to remember various concepts in Psychology

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Concept</th>
<th>Type of Mnemonic Technique used*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Piaget’s Theory of Cognitive Development</td>
<td>4, 6, 12</td>
</tr>
<tr>
<td>2.</td>
<td>Bruner’s Theory of Cognitive Development</td>
<td>4, 5, 6, 11</td>
</tr>
<tr>
<td>3.</td>
<td>Theory of Classical Conditioning</td>
<td>4, 5</td>
</tr>
<tr>
<td>4.</td>
<td>Theory of Operant Conditioning</td>
<td>4, 6</td>
</tr>
<tr>
<td>5.</td>
<td>Trial and Error Theory of Learning</td>
<td>4, 5, 6</td>
</tr>
<tr>
<td>6.</td>
<td>Theory of Insightful Learning</td>
<td>2</td>
</tr>
<tr>
<td>7.</td>
<td>Gagne’s levels of Learning</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>Distribution of Intelligence</td>
<td>6</td>
</tr>
<tr>
<td>9.</td>
<td>One, two factor Theory of Intelligence</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td>Guilford’s Structure of Intellect</td>
<td>2</td>
</tr>
<tr>
<td>11.</td>
<td>Gardner’s multiple Intelligence theory</td>
<td>1, 3</td>
</tr>
<tr>
<td>12.</td>
<td>Theory of process of Creativity</td>
<td>1, 3</td>
</tr>
</tbody>
</table>

*1-Name Mnemonics, 2-Word or Expression Mnemonics, 3-Model Mnemonics, 4-Note Organization Mnemonics, 5-Image Mnemonics, 6 - Connection Mnemonics

i) Table 1 indicates that Note Organization Mnemonics is the most popular among the students followed by Connection Mnemonics and Image Mnemonics.

ii) Mother tongue influences the formation of mnemonics.

iii) All the students (100%) have positive attitude towards memory model of teaching and mnemonic techniques.

iv) All the students (100%) strongly agree that this model of teaching is participatory.

v) 95% of the students (38 students) strongly agree that this method is interesting.

vi) 95% of the students (38 students) strongly agree that this method is useful in learning.

vii) 90% of the students (36 students) strongly agree that they will follow the same method for teaching when they become full-fledged teachers.

Conclusions
The study revealed that Memory Model of Teaching and mnemonics are quite successful among the students for learning the tough theories of psychology. This method makes learning an interactive, joyful and burden free process. The student and the teacher work as a team to evolve the technique from student’s frame of reference. Due to this fact students can recall the facts and theories at ease when the need arises. It will be handy when they sit for competitive exams for teaching competency.

REFERENCE