

Effectiveness of Mastery Learning Programme in teaching of Accountancy at Class XI

Introduction:

The subject Accountancy is introduced at higher secondary level at class 11. This year is the basic for acquiring knowledge of subject as well as career building. The main objective of teaching Accounting is not only to develop the intellectual skills of students but also to provide them with opportunities to work individually, in pairs, small and large groups. Students in addition to intellectual skills also need to equip themselves with professional skills like writing, speaking out, presenting, computer and information literacy, decision making and teamwork. In order to achieve this, new concepts, strategies and methodologies have to be introduced in the teaching of Accountancy. Mastery Learning Programme is an approach that makes the learners to learn according to their levels, pace, attempts and make learning more pleasant and student centered.

Mastery learning:

Mastery learning is based on Benjamin Bloom' Learning for Mastery model with refinements made by Block is an instructional method that presumes all children can learn if they are provided with the appropriate learning conditions. The term refers to the idea that teaching should organize learning through ordered steps. In order to move to the next step, students have to master the prerequisite step. According to Davis & Sorrel (1995) The Mastery Learning method divides subject matter into units that have predetermined objectives or unit expectations. Students, alone or in groups, work through each unit in an organized fashion. Students must demonstrate mastery on unit exams, typically 80%, before moving on to new material. Students who do not achieve mastery receive remediation through tutoring, peer monitoring, small group discussions, or additional homework. Additional time for learning is prescribed for those requiring remediation. Students continue the cycle of studying and testing until mastery is met.

Mastery Learning Programme:

The Mastery Learning Programme was developed and conducted according to the concept of Mastery Learning Model keeping the following points in mind.

1. Selection of the Content
2. Units divided into small learning units
3. Objectives / clear definition of what has to be mastered
4. Brief diagnostic test to be administered before the unit
5. Learning materials and instructional strategies
6. Formative evaluation and remediation
7. Summative evaluation / Integrated Test

Objectives of the Research Work:

1. To construct Mastery Learning Programme on selected topics of Accountancy subject from std. 11th syllabus.
2. To enrich almost all or all the students of the class up to maximum level of achievement through Mastery Learning Programme.

3. To increase pupil's interest and Attitude in the subject.
4. To study the effect of Mastery Learning Programme in relation to Attitude.
5. To study the effect of Mastery Learning Programme in relation to I.Q.
6. To study the effect of Mastery Learning Programme in relation to Retention.

Hypotheses:

- HO₁ There will be no significant difference between the mean scores of students treated by Mastery Learning Programme and Traditional method.
- HO₂ There will be no significant difference between the mean scores of boys treated by Mastery Learning Programme and Traditional method.
- HO₃ There will be no significant difference between the mean scores of girls treated by Mastery Learning Programme and Traditional method.
- HO₄ There will be no significant difference between the mean scores of high I.Q. students treated by Mastery Learning Programme and Traditional method.
- HO₅ There will be no significant difference between the mean scores of low I.Q. students treated by Mastery Learning Programme and Traditional method.
- HO₆ There will be no significant difference between the mean scores of students having Positive Attitude treated by Mastery Learning Programme and Traditional method.
- HO₇ There will be no significant difference between the mean scores of students having Negative Attitude treated by Mastery Learning Programme and Traditional method.
- HO₈ There will be no significant effect of Attitude on the relation of Teaching Methodology and Gender.
- HO₉ There will be no significant effect of Attitude on the relation of Teaching Methodology and I Q.
- HO₁₀ There will be no significant effect of Attitude on the relation of Teaching Methodology and Retention.
- HO₁₁ There will be no significant effect of Gender on the relation of Teaching Methodology and Attitude.
- HO₁₂ There will be no significant effect of Gender on the relation of Teaching Methodology and I Q.
- HO₁₃ There will be no significant effect of Gender on the relation of Teaching Methodology and Retention.
- HO₁₄ There will be no significant effect of I.Q on the relation of Teaching Methodology and Attitude.
- HO₁₅ There will be no significant effect of I.Q on the relation of Teaching Methodology and Gender.
- HO₁₆ There will be no significant effect of I.Q on the relation of Teaching Methodology and Retention.
- HO₁₇ There will be no significant difference between the mean scores of Retention treated by Mastery Learning Programme and Traditional method.

Methodology:

The experiment work was carried out in a school having two classes of commerce stream. Pre-test was given to both the class. One class taught with the Mastery Learning Programme was considered as an experiment group. The other class taught by traditional method is controlled group. The students attended the whole programme were considered as a sample. The experiment group had 39 students 19 boys and 20 girls. The control group had 35 students 24 boys and 11 girls.

Attitude Scale for the subject of Accountancy was constructed and standardized by making use of Likert's methods of summation to get a five point judgment on each item. To decide reliability and validity of the Attitude test- retest method was used. Reliability of the test is 0.84 and Validity of the test is 0.65 R.S.Patel's Verbal- Nonverbal group I.Q. Test for standard 11-12 was used to measure I.Q. A standardized achievement test / Summative Test was used to find the effect of Mastery Learning Programme. The same test was used to find the effect on Retention. During the Programme before moving to the next unit a developmental tests for each unit were applied.

Data collection and analysis:

The standardized achievement test (of the units taught) was administered to both the groups (i.e. traditional group and controlled group) at the same time (simultaneously); and the scores were attained. Moreover, I.Q. test, and Attitude test (scale) for subject of Accountancy was given to both the groups, and the required data and scores were obtained. To find the effect on retention test retest method was applied. The impact of independent variable on different dependent variables was found out by ANOVA (Analysis of variance) and the impact of I.Q, Attitude and Retention on achievement of students was found out by t test.

Results and interpretation:

1. There is significant difference between Mean scores of students treated by Mastery Learning Programme and Traditional Methodology. Calculated value of t is 6.68 and it is significance at 0.01 level. Mean scores of Mastery Learning group is 55.67 and Traditional Teaching group is 42.34. Mastery Learning programme shows positive effect on Achievement of students.
2. There is significant difference between Mean scores of boys treated by Mastery Learning Programme and Traditional Methodology. Calculated value of t is 2.97 and it is significance at 0.01 level. Mean scores of Mastery Learning boys group is 49.79 and Traditional Teaching group boys is 42.50. Mastery Learning programme shows positive effect on Achievement of boys.
3. There is significant difference between Mean scores of Girls treated by Mastery Learning Programme and Traditional Methodology. Calculated value of t is 4.44 and it is significance at 0.01 level. Mean scores of Mastery Learning girls group is 61.25 and Traditional Teaching group girls is 42. Mastery Learning programme shows positive effect on Achievement of girls.

4. There is significant difference between Mean scores of High I Q students treated by Mastery Learning Programme and Traditional Methodology. Calculated value of t is 4.04 and it is significance at 0.01 level. Mean scores of Mastery Learning High I Q students is 64.81 and Traditional Teaching group girls is 47.35 Mastery Learning programme shows positive effect on Achievement of High I Q students.
5. There is significant difference between Mean scores of Low I Q students treated by Mastery Learning Programme and Traditional Methodology. Calculated value of t is 2.51 and it is significance at 0.05 level only. Mean scores of Mastery Learning Low I Q students is 50.40 and Traditional Teaching group girls is 35 Mastery Learning programme shows positive effect on Achievement of Low I Q students at 0.05 level only.
6. There is significant difference between Mean scores of High (Positive) Attitude students treated by Mastery Learning Programme and Traditional Methodology. Calculated value of t is 3.27 and it is significance at 0.01 level. Mean score of Mastery Learning High Attitude students' is 57.78 and Traditional Teaching group girls is 44.78 Mastery Learning programme shows positive effect on Achievement of High Attitude students.
7. There is no significant difference between Mean scores of Low (Negative) Attitude students treated by Mastery Learning Programme and Traditional Methodology. Calculated value of t is 1.38 and it is not significance at 0.05 and 0.01 levels. Mean scores of Mastery Learning Low (Negative) Attitude Students is 49.92 and Traditional Teaching group is 39.90 Mastery Learning Programme does not show positive effect on Achievement of Low (Negative) Attitude students.
8. There is no significant effect of Attitude on the relation of Teaching Methodology and Gender. Ho8 is accepted. F value is 0.328 and it is not significant.
9. There is no significant effect of Attitude on the relation of Teaching Methodology and I Q. Ho9 is accepted. F value is 1.27 and it is not significant.
10. There is no significant effect of Attitude on the relation of Teaching Methodology and Retention. F value is 1.84 and it is not significant.
11. There is no significant effect of Gender on the relation of Teaching Methodology and Attitude. F value is 1.12 and it is not significant.
12. There is no significant effect of Gender on the relation of Teaching Methodology and I Q. F value is 0.87 and it is not significance.
13. There is no significant effect of Gender on the relation of Teaching Methodology and Retention. F value is 1.17 and it is not significant.
14. There is no significant effect of I Q on the relation of Teaching Methodology and Attitude. F value is 0.95 and it is not significant.
15. There is no effect of I Q on the relation of Teaching Methodology and Gender. F value is 1.07 and it is not significant.
16. There is no effect of I Q on the relation of Teaching Methodology and Retention. F value is 1.277 and it is not significant.

17. There is significance difference between Mean scores of retention of students treated by Mastery Learning Programme and Traditional Methodology. Calculated value of t is 3.43 and it is significance at 0.01 level. Mean scores of Retention of Mastery Learning group is 3.14 and Traditional Teaching group is 3.96. Mastery Learning programme shows positive effect on Retention of students.

Implications of the study:

Though there is less scope for teachers' initiation in the present system of education for time consuming strategies like Mastery Learning Programme, the teachers eager to adopt new ideas can profitably plan the Mastery Learning Programme within the limitations of the system.

- If not all, basic content from the chosen subject can be taught by the Mastery Learning Programme in school schedule.
- Time of the recess, proxy period and half an hour before/after the school time can be used for the remedial work during Mastery Learning Programme.
- The modules for self- learning material and remedial can be planned and prepared during the vacation.
- The help of high achievers can make the task easy; as well they get challenging work.
- Team of teachers of the same subject from different nearby schools can plan and prepare the learning material and correctives. For this they can meet periodically according to their convenience.
- Teachers should show interest in up bringing the slow learners by planning pair of slow learners and high achievers or give some assignments in groups under the observation of group leaders.

Conclusion:

Results show positive effect on achievement and retention of the students in the subject of Accountancy. It is obvious from the study that Mastery Learning Programme is far better than teaching with traditional method. Mastery learning offers exciting possibilities for those who would use and/or study it. Teachers will find that Mastery Learning Programme provides an efficient and effective means of transformation of knowledge. Administrators can greatly shift their schools' entire achievement distribution upwards. Students acquire successful learning experiences that will help shape his self-confidence and immunize him against mental illness. Society will get skilled professionals according to increasingly demands.