

To Check the Effectiveness of the Use of Educational Tools on the Educational Achievement of Secondary School Students in Wardha District - An Experimental Study

Dr. Shital Dinkarrao Adgaonkar

1. Introduction

The twenty - first century belongs to science.

Innovation is gaining momentum in all areas. The field of education is no exception to this. Teaching can be made more effective through educational technology. Through this the academic achievement of the students was better.

Therefore, it is necessary for the teacher to increase the academic achievement of the students by making the teaching process more efficient and effective by using the educational tool in teaching.

1.1 Statement of the problem

To check the effectiveness of the use of educational tools on the educational achievement of secondary school students in Wardha district- An experimental study.

1.2 Importance of research

The main purpose of education is to change behaviour in the desired direction. Considering the huge revolution in the field of education in today's fast paced era. With the use of the tool. It is important to check the effect on the edit. Through the use of educational materials, the student becomes active and affects his / her academic performance. So this research is going to be important for the teaching class.

1.3 Research Objectives

- 1) To examine the effect of the use of educational tools on secondary school students on their educational achievement.
- 2) To check the need for use of educational tools on secondary school students.
- 3) To compare the effect on the educational performance of secondary school boys and girls.

1.4 Research hypotheses

- 1) The use of educational tools has an effect on the academic performance of students at the secondary level.
- 2) There is a difference in the effect of the use of educational materials on the academic achievement among the students at the secondary level.
- 3) There is a difference in the effect of the use of secondary tools on their academic performance.

1.5 Research Methods

Experimental research method was used as only experimental method is suitable for the presented research.

2. Experimental Design

This research has been done experimentally. The design is of special importance in the experimental method. Equivalent Parallel Groups were selected for this experimental design.

Total Students 40	
Experimental Group 20	Controlled Group 20

Equivalent parallel groups, post test only Design,

Same group	Independent variable	Post - test
Experimental Group	Teaching through educational means	T ₂
Controlled Group	Teaching lectures	T ₂

2.1 Judgment

For the present research 40 students from class 9 of Swavalambi school were included in the guideline.

Name of the School	Gender	Judgment	
Swavalambi School, Wardha	Students girl	10	Experimental Group
	Student boys	10	
	Students girl	10	Controlled Group
	Student boys	10	

2.2 Tools

In the present research, the following tools were used to check the effectiveness of the use of educational tools.

- 2.2.1 Intelligence Test - For Students
- 2.2.2 Questionnaire - For Students
- 2.2.3 Demonstration Lessons - For Students
- 2.2.4 Editing Test - For Students.

3. Conclusions

The following conclusions were drawn from the analysis and explanation of the hypotheses of this research.

3.1 From Hypothesis 1: -

- 1) There is a difference of 4.5 in the experimental and controlled group from the performance in the editing test.
- 2) There is a difference of 0.12 in the standard deviation.
- 3) Students at the secondary level are affected by the use of educational tools.
- 4) It is necessary to use educational tools while teaching secondary level students.
- 5) It seems that the use of educational tools has increased the marks of the students.

3.2 From Hypothesis 2: -

- 1) There is a difference of 4.5 between the two groups based on the performance in the editing test. And there is a difference of 0.12 in the standard deviation.
- 2) The mean and ratio of both the groups derived from the deviation is $t = 328$.
- 3) The obtained t is meaningful at the level of 0.01 and 0.05.
- 4) There is a difference in the impact of students' use of educational tools on their academic performance. This hypothesis is accepted.
- 5) The method of teaching through educational means is more effective than the lecture (traditional) method.
- 6) This method makes the students more interested in learning.

3.3 Hypothesis no. From 3: -

- 1) There is a difference of 7 between boys and girls on the performance of boys and girls in the experimental group and there is a difference of 1.21 in the ratio deviation.
- 2) The mean of both is derived from the deviation of $t = 5.93.3$ Received t is meaningful at 0.01 and 0.05 levels.
- 3) There is a difference in the effect of the use of educational tools on their academic achievement by boys and girls at the secondary level. This hypothesis is accepted.
- 4) By teaching through educational tools, the educational achievement of boys is better and more effective than that of girls.
- 5) This method helps the students to study better.

3.3 Instructions**3.3.1 General Instructions**

- 1) The method of teaching through educational means is an effective method. Therefore, the government should prepare good quality educational tools for each subject from expert teachers and provide them to the schools.
- 2) As this method is very useful mainly for Mathematics, Science, History, Geography subjects, educational tools on this subject should be provided to the schools.
- 3) Due to the increasing number of students, they are not given personal attention and students are neglected in their studies, so only 25 to 30 students should be kept in a class.
- 4) As there is a huge explosion of knowledge, arrangements should be made to impart knowledge of new subjects to the students through educational means.

- 5) Due to increasing education, the government should increase the number of schools and supply trained teachers.
- 6) Teachers should be trained to create new educational tools and encourage them to teach in the classroom by providing materials.
- 7) Teachers should not be appointed on the basis of academic qualifications but on the basis of skill test for teachers.

3.3.2 Instructions to teachers

- 1) Since the method of teaching through educational means is excellent, this method must be used in teaching.
- 2) As the field of knowledge is increasing day by day, teachers should acquire knowledge of new methods of teaching and use it in daily teaching.
- 3) As much as possible, educational tools should be used in teaching as it enhances the quality of the student by teaching through educational tools.
- 4) Teachers should create new educational tools on their subject lessons.
- 5) Facilitate teaching in every classroom with modern educational tools.
- 6) Create an environment conducive to study in the classroom.
- 7) Teachers should try to raise the standard of their subject knowledge and teaching skills.
- 8) Teachers should avoid subjectivity and give equal opportunity to every student.
- 9) Since it is only in the hands of the teacher to implement the method of teaching through educational means, he must take steps in that direction.
- 10) The use of educational tools in teaching is a waste of time.

3.3.3 Instructions to the students

- 1) Students should use the educational tool to prove their knowledge and students must take the information from the teachers and use it for study.
- 2) If there are any problems while studying with this method, ask the teacher immediately.
- 3) When teachers teach, students should pay attention.
- 4) Study with a definite goal in mind.
- 5) There is a huge explosion of knowledge in the present age. So every student should try to learn new knowledge on their own without the help of teachers.
- 6) Teachers should be encouraged to teach through educational means.

The study will be effective if the students study in this way. Knowledge will be firm. It will save time. Teachers will not be afraid. Inspire new knowledge. In this way, if the government, teachers and students understand each other's needs and cooperate with each other in such a way that they will be met, the effective effect of the method of teaching through educational means will definitely be seen in the future.

4. Suggestions for Further Research

- 1) Research can be done on the availability of educational materials in secondary schools.

- 2) There is a lot of scope for research on the depression in the teaching of teachers about the use of educational tools.

References

- [1] Aglave Pradip, Research methodology and Techniques, VidyaPublications, Nagpur, 1 Jan.2000.
- [2] Dr. Aher Hira, Teachers and Education in Emerging Indian Society, VidyaPublications, Nagpur.
- [3] Bapat B. G., Educational Research , New Publications, Pune
- [4] Dr. Bhitande V. R., Educational Research Methodology, May 2005.
- [5] Dr. Bodade, Dr. BhitandeDr. Jagtap, Meaningful teaching method, NutanPublications, Pune, May 2005.
- [6] Butch M. B., Fourth survey of educational research
- [7] Kundale M. B., Pedagogy and Methods, Vinas Publications, Pune Feb, 2005
- [8] Dr. More Chandrakant, Dr. Bhilegaonkar Sadanand, Teacher TrainingNitya New Publications, Sep.2008
- [9] Mule R. S. And Umate V. T., Fundamentals of Educational Research
- [10] Dr. Nagtode Kiran, Development and teaching of learners, Vidya Publications, Nagpur.1 Jan.2006
- [11] Dr. Dr. ParsnisHemlata, Dr. Deshpande Lina, Educational Work Research, New Publication, Pune 2005
- [12] Parsnis N. R., Teacher Training, New Publication, Pune.1993
- [13] Pandit Ravi, Educational Psychology, Pimpalpure & Co. Publishers. June, 2007
- [14] Dr. Ponkshe D. B., Educational Psychology and Experimental Work New Publication, Pune. Jan.2005