Summary

The aim of this dissertation **"Effectiveness of computer games on student's cognitive skills and achievement in mathematics in class VII** "is to analyze and compare the two methods of teaching i.e., traditional method and online computer games. This dissertation is composed of five chapters starting from the introduction to the conclusion. The objective is to study the effectiveness of online computer games on students' cognitive skills and academic achievement in mathematics. For this, the population selected was class VII students and the sample was 50 students of Demonstration Multipurpose School of Bhopal. Tools selected for the study were pre-test, post-test, and achievement tests. Initially, both the classes i.e., class IVV A and VII B were given lectures in the traditional method. After which a pre-test was conducted consisting of 30 questions. After this class VII A was taught using online computer games whereas class VII B was continued with the traditional method. After giving lectures for one week both the classes were given a post-test and achievement test to check and compare the difference between the two. After this, data was collected and T-test was applied. While interpreting, it was revealed that the mean score of the students in the experimental group in the pre-test is 13.41 and the post-test is 18.95, which is higher than those of the control group. It shows the significant difference between the pre-test and post-test scores of the students. And the calculated value of 't' in the pre-test is -.225 and comparing this to the post-test the value is -2.508. Therefore, it can be stated that there is a significant difference in the achievement of two groups i.e., the control group and the experimental group which is the traditional method and through online gaming.

The game-based teaching strategy is therefore found to be more effective when teaching VII graders. The researcher found that the findings of this study showed similar results to previous research. Game-based learning makes learning and teaching fun and focused. Games provide descriptive explanations, providing a set of boundaries within a safe environment, exploration, reflection, and exploration. They provide the motivation for success and reduce the dose of failure. The addition of game elements integrated into a normal learning environment is a way to increase engagement and thinking ability. Game-based learning gives students a sense of belonging, a quick reaction, a sense of accomplishment, and success in fighting and overcoming a challenge.

In game-based learning strategies activities, opportunities are provided to promote comprehension, analysis, and reflection. Therefore, interest and motivation may contribute to the outcome presented. In the application of game-based learning strategies, many games are used. It concludes that using online games is very effective in teaching students in the classroom.

Bibliography