

EFFECTIVENESS OF EDUTAINMENT ON ACADEMIC ACHIEVEMENT OF STUDENTS FROM TRIBAL AREAS OF BASTAR

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Abstract: The purpose of this study is to examine the effectiveness of edutainment on academic achievement of students from Tribal areas of Bastar, one of the Districts in Chhattisgarh in central India. A total of 120 students from standard XI of Govt. Higher Secondary School have been involved in this study. They shared the same level of knowledge and talents. The respondents were divided into two different groups-control group and experimental group. Each group consisted of 60 students. Both groups were given a set of pre-test. Then the edutainment program was used to support the teaching and learning process in experimental group. While the control group was taught using traditional methods, the experimental group was taught using edutainment program prepared by the scholar. After that, the respondents from both groups were given post-test and a set of questionnaire. The collected data were analyzed using manual statistical methods. Results showed, 96.7% of students (58) agreed that they liked to use edutainment program as it increased their motivation to learn and helped them to learn Communication Skills in English in a better way. Most students agreed that edutainment program is learner-centered and students' friendly and it is suitable to be used in the classroom as it enhanced teaching-learning process.

Keywords: Edutainment (Education + Entertainment), Edutainment program, Students' achievement, Students' attitude, Students' understanding, Teaching method.

1. Introduction: Bastar is one of the Districts in Chhattisgarh in central India. Jagdalpur is its headquarters. Of the total population more than 70% are tribals like Gond, Madia, Muria, Dhruva, Bhatra, Halba, etc. According to 2011 census the average literacy rate of the region is 54.94%. Most of the students in Government schools are first / second generation learners. Automatically the achievement level of these students is very low. The reasons for this poor standard in education are lack of motivation, interest, enthusiasm, etc. Edutainment can be the best means for developing these factors and thereby to increase their level of achievement. In recent times, electronic games, home computers and the internet have taken an important place in the life of the students, especially of adolescents. Edutainment has become immensely popular and educationally successful among parents, teachers and children.

2. What is Edutainment?: Edutainment (Education through entertainment OR Educational entertainment) is content designed to educate and entertain. It includes content that is primarily educational but has incidental entertainment value, and content that is mostly entertaining but contains educational value. It is being used by governments in various countries to disseminate information via television productions, film, museum exhibits, and computer software which use entertainment to attract and maintain an audience to influence viewers' opinions and behaviors.

3. Types of Edutainment: Educational toys and games, as major part of edutainment, inspire the students to learn in a better way. Communication Satellite plays a quite important role in educational

purposes. Radio, Television and Films are efficient means for curriculum transaction, of upgrading teachers and bringing about significant changes in educational practices. Computerized education and internet have been proved effective teaching and learning methods in classrooms. Public Access Areas like Museums and Zoos can serve as efficient means to get firsthand experience and knowledge for the students.

4. Literature Reviews: As per the study made by Saroj Pandey, 2007, Edutainment as a method of teaching-learning can best be suited to the new constructivist approach in education suggested by National Curriculum Framework 2005. The study made by Esta de Fossard & Robert Lande, 2008, summarized the advantages of entertainment-education as the Nine Ps (9 Ps).

5. Research Objectives:

- To identify how edutainment can affect the students' achievement in the tribal areas of Bastar
- To identify whether edutainment can change students' attitude towards study in class in the tribal areas of Bastar

6. Methodology:

6. 1. Participants: This research was conducted in a Government Higher Secondary School located in Adawal, 6 kms away from Jagdalpur in the District of Bastar in Chhattisgarh. Students of standard XI (11) were selected to involve in the research. Out of them 120 students were randomly selected, of almost the same IQ level. The students were divided equally into two different groups: experimental group and control group.

6. 2. Instruments : The main instrument used by the scholar in the study was a set of questionnaires consisting of 2 sections. The first section of the questionnaire covered the questions about the background of the respondents, while the second section consisted of questions that related to student’s understanding, interest and teaching methods. The students were given the questionnaire after the learning process using edutainment program prepared by the scholar.

6. 3. Procedure: The first step in this research was to teach both groups of students ‘Communication Skills in English’. The control group was taught traditionally using Blackboard, charts, etc. Meanwhile, the experimental group was taught using the edutainment program prepared by the scholar. After the learning session ended, the questionnaire was distributed to the students. Permission to conduct the research was first secured from the school Principal and the sessions took place in the classroom during the English period with the help of Laptop and Projector Screen as well as audio-visual aids. All the respondents were assured that their participation in the study was voluntary and at any time they can opt out.

6. 4. Data Analysis: The data collected during this research was analyzed using manual statistical methods. Two tailed Z-test was used to elicit whether there was a significant difference among the two groups: control group and experimental group. Significance level was decided by taking p values into consideration. The P value/alpha value was set at 0.05.

7. Findings and Discussion:

7. 1. Edutainment Program: This research was conducted using the Edutainment program prepared by the researcher.

7. 2. Pre-test and Post-test Result: Both groups had learnt ‘Communication Skills in English’ using traditional teaching methods. After the class ended, they had been given a set of questions that tested their understanding towards the topic. After two weeks, the students were being taught again the same topic. This time the experimental group was taught using the edutainment program. The result of the students’ achievement is shown in Fig. (a) and Fig. (b). Based on Fig. (a) and Fig. (b), the results indicated that the highest number of students in control group (pre-test) got 14 marks (22 students) while the highest number of students in control group (post-test) got 13 marks (20 students). The highest mark for the students in experimental group (pre-test) was 12 and 15 (both with the number of students 16) while the highest number of students in experimental group (post-test) got 15 marks (30 students). There is a big difference when compared to the result of post test for experimental group. After having a class using edutainment program, half of the students (30 students) got the score with 15 marks.

7. 3. Analysis of Z-test: Z-test was used to compare the mean score for the responses. As seen in Table I, at the beginning the pre-test means of control group and experimental group were 13.16 and 13.10 respectively. These results showed that the sample’s pre-treatment knowledge levels were much closer to each other and there was not a statistical difference between the two groups ($p = + / -1.96$, p limit is 0.05).

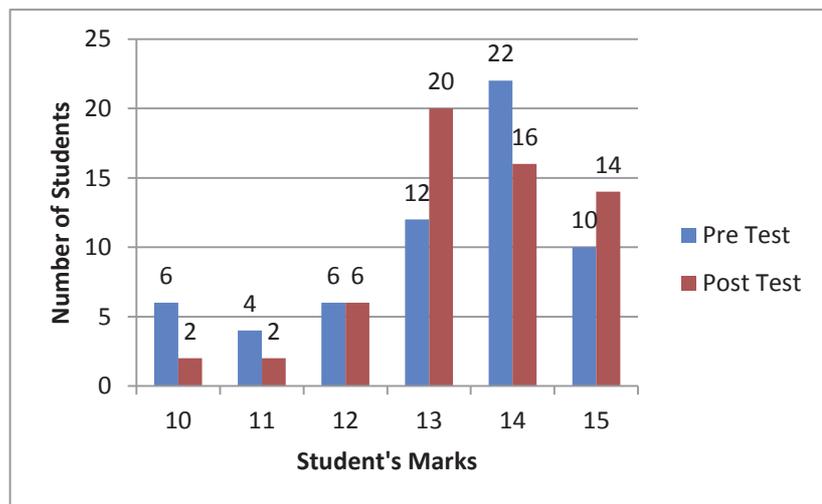


Fig. (a): Pre-test and post-test result for control group

Table I: Z-test result of pre-test for control group and experimental group

Value	Pre-test control group	Pre-test experimental group
Mean	13.16	13.10
Standard deviation	0.583	0.574
Significance value of z test	-1.992	-2.8

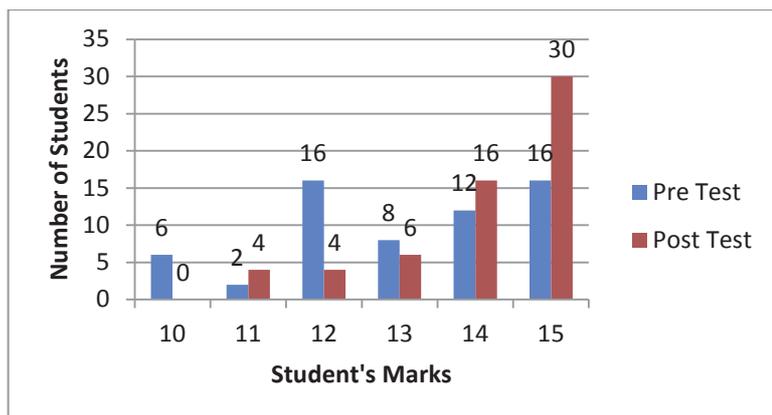


Fig. (b): Pre-test and post-test result for experimental group

At the end of the treatment, the post-test means of control group and experimental group were 13.46 and 14.23 (as shown in Table II). A statistical significant difference was found between the groups ($p = 0.005$, $p < 0.005$).

Table II: Z-test result of post-test for control group and experimental group

Value	Post-test control group	Post-test experimental group
Mean	13.46	14.23
Standard deviation	0.624	0.774
Significance value of z test	1.875	9.2

As per the z-test, the first step was to state the Null Hypothesis.

“There is no effectiveness of edutainment on the academic achievement of students from tribal areas of Bastar.”

The Alternative Hypothesis was,

“There is effectiveness of edutainment on the academic achievement of students from tribal areas of Bastar.”

The Alpha level (Significance level) was set at .05. The z-score associated with the current significance level is 1.96.

As this is a two-tailed test, the scholar had to consider the left as well as the right tails. Therefore, a value less than -1.96 or greater than 1.96 would lead to the rejection of Null Hypothesis.

In case 1 (Control group), in the pre-test and post-test, the values fall between the specified range. So the Null Hypothesis is accepted.

In case 2 (Experimental group), in the pre-test, the z-value is within the range and therefore the Null Hypothesis is accepted. In the post-test, the z-score is greater than 1.96. Therefore, the Null Hypothesis is rejected and the Alternative Hypothesis is accepted.

7. 4. Questionnaire analysis: The questionnaire was given to the respondents in the experimental group after they had a lesson using edutainment program. The questionnaire was divided into two main sections- Section A that focused on the background of the respondents and Section B that covered the students’ response towards edutainment program. In

this paper, the discussion of findings is focused on the second section of the questionnaire.

7.5. Students’ Understanding: Fig. (c) shows the evaluation result regarding the students’ understanding towards ‘Communication Skills in English’. As we can see from the graph, 96.7 % (58 students) of the respondents agreed that they liked edutainment program as it increased their motivation to learn and helped them to learn ‘Communication Skills in English’ in a better way; 93.3% (56 students) said that the edutainment program increased their understanding of the ‘Communication Skills in English’ and knowledge of grammatically correct language. 90% (54 students) of the students agreed that edutainment program gave them chance to increase their vocabulary. When asked about the usage of edutainment program in expressing ideas in appropriate manner, 80% (48 students) said that edutainment helped them for expressing ideas in appropriate manner.

7. 6. Students’ Attitude: The respondents also had been asked about their attitude towards edutainment program. In Fig. (d), 96.7% (58 students) said that they liked to use this program as it helped to increase their interest to learn ‘Communication Skills in English’ and also increased their motivation towards learning; 93.3% (56 students) said that teaching-learning process became more interesting when they learned the topic using edutainment program; more than 85% (52 students) agreed that the edutainment program helped them in self learning.

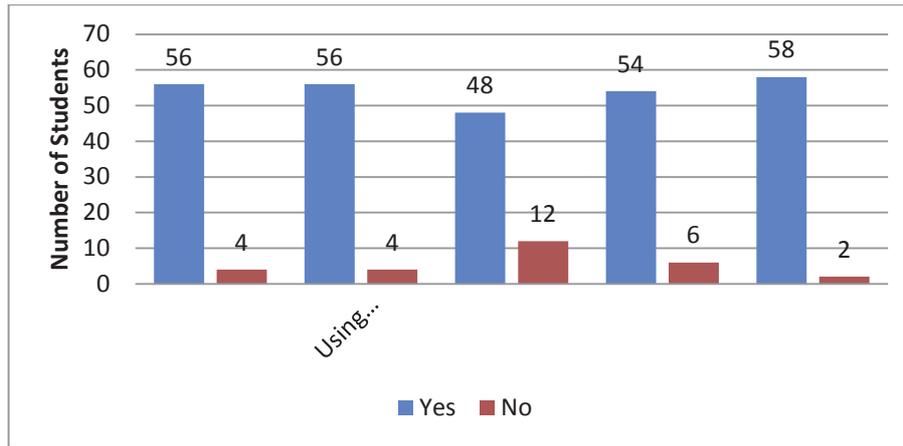


Fig. (c): Evaluation result of students' understanding towards communication skills in English

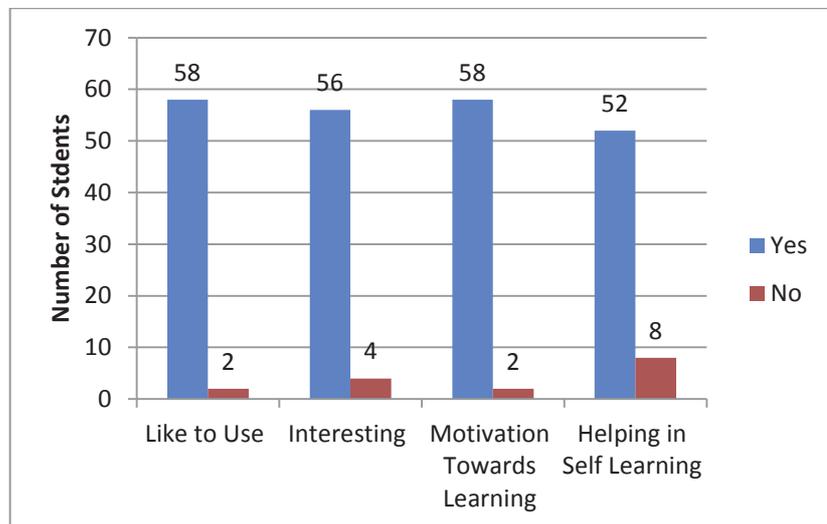


Fig. (d) : Evaluation result regarding students' attitude towards edutainment program

8. Conclusion: Educating through edutainment program is educating the students for a better tomorrow and for a bright future. It is challenging, but is a great need of the day. This study proved that

Edutainment program is successful in increasing the achievement level of students of Bastar.

“50% Education + 50% Entertainment → 100% Edutainment = 100% Achievement” (Fig.(e))

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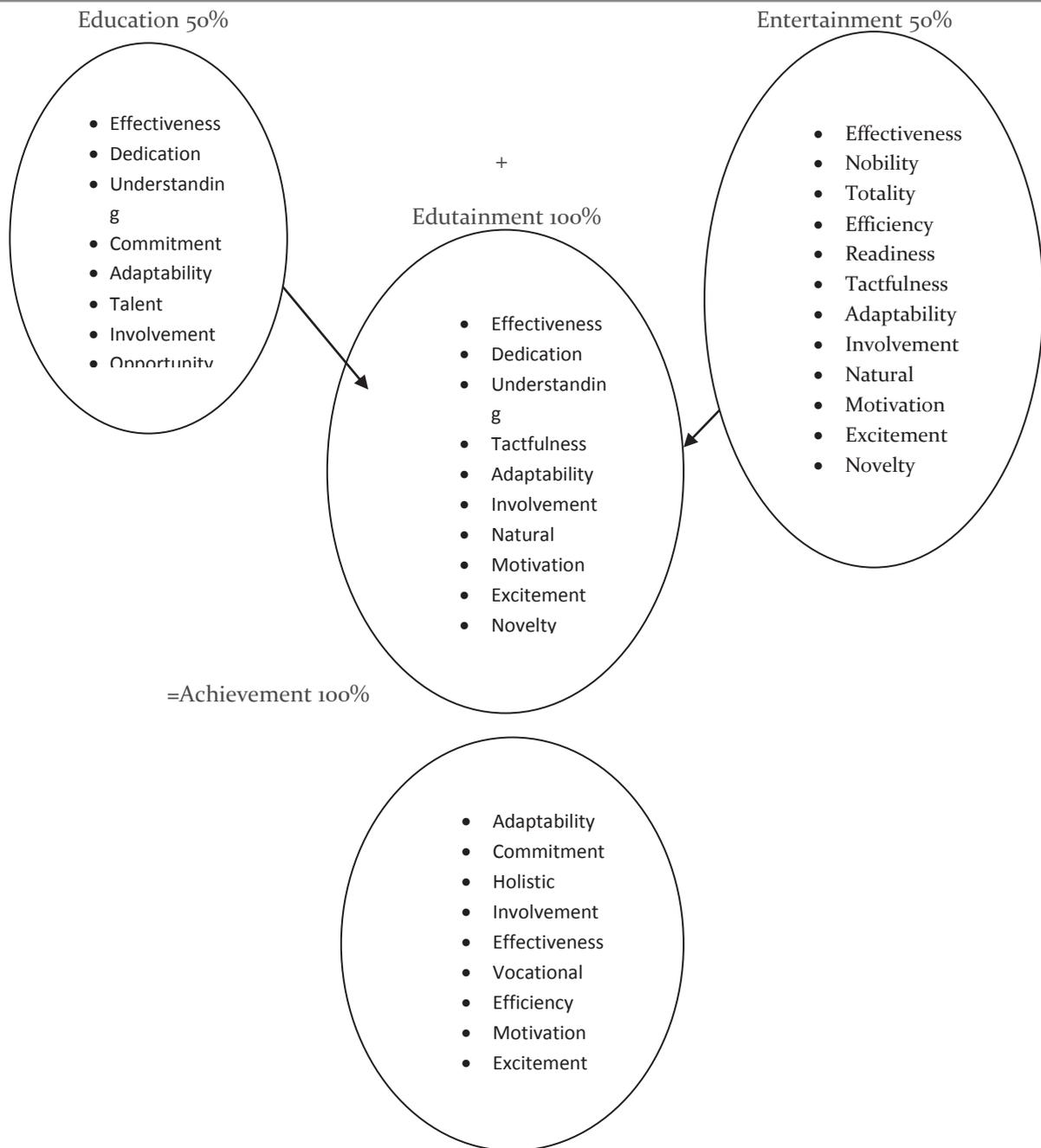


Fig. (e): Schematic representation of the relationship between Educations, Entertainment, Edutainment and Achievement

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