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Effectiveness of Educational Drama on Academic Achievement of Upper Primary Students in Gujarati Language, English Language and Social Science Education: A Quasi-Experimental Study

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Abstract

This study examined the effectiveness of educational drama on the academic achievement of upper primary students (Standards 6 to 8) of Gujarati-medium schools in Gujarati language, English language and social science. A quasi-experimental, non-equivalent pre-test post-test control group design was adopted. A sample of 120 students was divided into an experimental group (n = 60), taught through drama-integrated lessons for twelve weeks, and a control group (n = 60), taught through conventional methods. Subject-wise achievement tests of 50 marks each were administered before and after the intervention. The groups were equivalent on the pre-test in all three subjects. On the post-test, the experimental group scored significantly higher than the control group in Gujarati ($t = 6.46$), English ($t = 5.78$) and social science ($t = 6.85$), all at $p < .001$, with large effect sizes (Cohen's d between 1.05 and 1.25). The findings indicate that educational drama is an effective pedagogical approach for improving achievement in language and social science education at the upper primary stage, and they support its wider integration in classroom teaching and teacher education.

Keywords: educational drama, academic achievement, quasi-experimental study, upper primary education, Gujarati language, English language, social science

1. Introduction

The upper primary stage, covering Standards 6 to 8, is a critical period in schooling. Students meet more abstract content, a heavier vocabulary load and increased expectations of independent understanding. In Gujarati-medium schools, three subjects bear much of this load: Gujarati, the

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language through which all other learning is accessed; English, usually a second or additional language and a gateway to higher education; and social science, which presents history, geography, civics and economics in text-dense form. In many classrooms these subjects are still taught mainly through lecture, textbook reading and memorisation, which tend to produce short-term recall, limited understanding and weak motivation.

Educational drama offers an alternative. In this approach students take on roles, enter imagined situations, improvise, discuss and reflect, guided by a teacher who directs the experience toward curricular objectives (Bolton, 1984; Heathcote & Bolton, 1995). Learning is active, social and emotionally engaging, which is consistent with constructivist and sociocultural views of how children learn (Dewey, 1938; Vygotsky, 1978). The National Curriculum Framework 2005 and the National Education Policy 2020 both call for experiential, art-integrated and activity-based pedagogy and for the reduction of rote learning (National Council of Educational Research and Training [NCERT], 2005; Ministry of Education, 2020). Drama is a practical means of realising these aims.

Despite its promise, systematic experimental evidence on drama in Gujarati-medium upper primary classrooms is limited. The present study was undertaken to fill this gap by testing the effectiveness of educational drama on achievement in three subjects simultaneously.

2. Review of Related Literature

Research on drama and achievement has focused mostly on language outcomes. In a meta-analysis of classroom drama studies, Podlozny (2000) found a strong positive relationship between drama and verbal skills, including oral language, reading comprehension and writing. Fleming, Merrell and Tymms (2004), working in primary schools, reported positive effects of drama on pupils' language performance and on their attitudes toward school. For second-language learning, Krashen (1982) argued that acquisition is promoted by meaningful input in a low-anxiety environment, a condition that role-play supplies because the fictional frame reduces the fear of error.

In social studies, drama is regarded as a way of making remote events and abstract institutions concrete. Taking the role of historical or civic actors helps students see events as the outcome of human decisions, deepening comprehension and retention (Heathcote & Bolton, 1995). Evidence

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in other subjects has been mixed, and many studies suffer from small samples and short durations. A common conclusion is that benefits depend on the quality, regularity and curricular alignment of drama activity. Few of these studies have been conducted in Indian regional-medium schools, and fewer have examined language and social science together, which justifies the present investigation.

3. Objectives of the Study

1. To compare the pre-test achievement of the experimental and control groups in Gujarati, English and social science.
2. To study the effectiveness of educational drama on the academic achievement of upper primary students in Gujarati language education.
3. To study the effectiveness of educational drama on the academic achievement of upper primary students in English language education.
4. To study the effectiveness of educational drama on the academic achievement of upper primary students in social science education.

4. Hypotheses

H_{01}: There is no significant difference between the mean pre-test scores of the experimental and control groups in Gujarati, English and social science.

H_{02}: There is no significant difference between the mean post-test achievement scores of the experimental and control groups in Gujarati.

H_{03}: There is no significant difference between the mean post-test achievement scores of the experimental and control groups in English.

H_{04}: There is no significant difference between the mean post-test achievement scores of the experimental and control groups in social science.

5. Methodology

5.1 Research Design

The study used a quasi-experimental non-equivalent control group design with a pre-test and a post-test (Campbell & Stanley, 1963). Random assignment of individual students was not possible because intact classes are the unit of instruction in schools. Whole classes were therefore allotted

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to the experimental and control conditions, and the pre-test was used to check the initial equivalence of the groups.

5.2 Variables

The independent variable was the method of teaching at two levels: educational drama (experimental group) and conventional instruction (control group). The dependent variables were academic achievement in Gujarati, English and social science.

5.3 Population and Sample

The population consisted of students of Standards 6 to 8 studying in Gujarati-medium schools. A sample of 120 students was drawn from two schools, using intact classes, and divided into an experimental group of 60 and a control group of 60. Each group comprised 20 students from each of Standards 6, 7 and 8, with equal numbers of boys and girls, as shown in Table 1.

Table 1. Distribution of the sample

Group	Boys	Girls	Total
Experimental	30	30	60
Control	30	30	60
Total	60	60	120

5.4 Tools

Three researcher-made achievement tests, one each for Gujarati, English and social science, were used. Each test carried 50 marks and was based on the prescribed textbook units taught during the intervention, with items covering knowledge, understanding and application. The tests were validated by subject experts and teacher educators for content validity, tried out on a separate group of students, and their reliability was established through the split-half method. Parallel forms were used for the pre-test and post-test to reduce the effect of recall.

5.5 The Intervention

The experimental group received drama-integrated lessons for twelve weeks, with one 40-minute lesson per subject per week. Techniques included role-play, improvised dialogue, hot-seating, freeze frames, mock panchayat and parliament, dramatisation of prose lessons and folk tales, and teacher-in-role. Each lesson had a stated learning objective and closed with a reflection discussion

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so that the enacted experience was linked to the content. The control group was taught the same units, over the same period and by teachers of equal experience, through the lecture and question-answer method.

5.6 Procedure and Statistical Techniques

The pre-tests were administered in the first week, the intervention followed, and the post-tests were administered after the twelfth week. Means and standard deviations were computed for each group, and the significance of difference between the means of independent groups was tested with the t-test at the .05 level. Effect size was estimated with Cohen's d, interpreted as small (0.2), medium (0.5) and large (0.8) (Cohen, 1988).

6. Results and Interpretation

6.1 Equivalence of the Groups

Table 2 shows the pre-test scores. The differences between the two groups were small and statistically non-significant in all three subjects, so the null hypothesis H_{01} is retained: the groups were equivalent before the intervention.

Table 2. Pre-test scores of the experimental and control groups (N = 60 each; maximum score = 50)

Subject	Experimental Mean (SD)	Control Mean (SD)	t (df = 118)	Significance
Gujarati	24.1 (5.9)	23.8 (6.1)	0.27	Not significant
English	21.7 (6.0)	21.9 (6.2)	0.18	Not significant
Social Science	23.0 (5.7)	22.6 (6.0)	0.37	Not significant

6.2 Post-test Achievement

Table 3 presents the post-test results. In every subject the experimental group obtained a higher mean than the control group, and the differences were significant at the .001 level. The null hypotheses H_{02}, H_{03} and H_{04} are therefore rejected. Cohen's d values of 1.05 to 1.25 indicate large effects.

Table 3. Post-test scores of the experimental and control groups (N = 60 each; maximum score = 50)

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Subject	Experimental Mean (SD)	Control Mean (SD)	Mean difference	t (df = 118)	p	Cohen's d
Gujarati	38.4 (5.8)	31.2 (6.4)	7.2	6.46	< .001	1.18
English	35.6 (6.1)	28.9 (6.6)	6.7	5.78	< .001	1.05
Social Science	37.9 (5.5)	30.5 (6.3)	7.4	6.85	< .001	1.25

The comparison of post-test means is shown graphically in Figure 1.

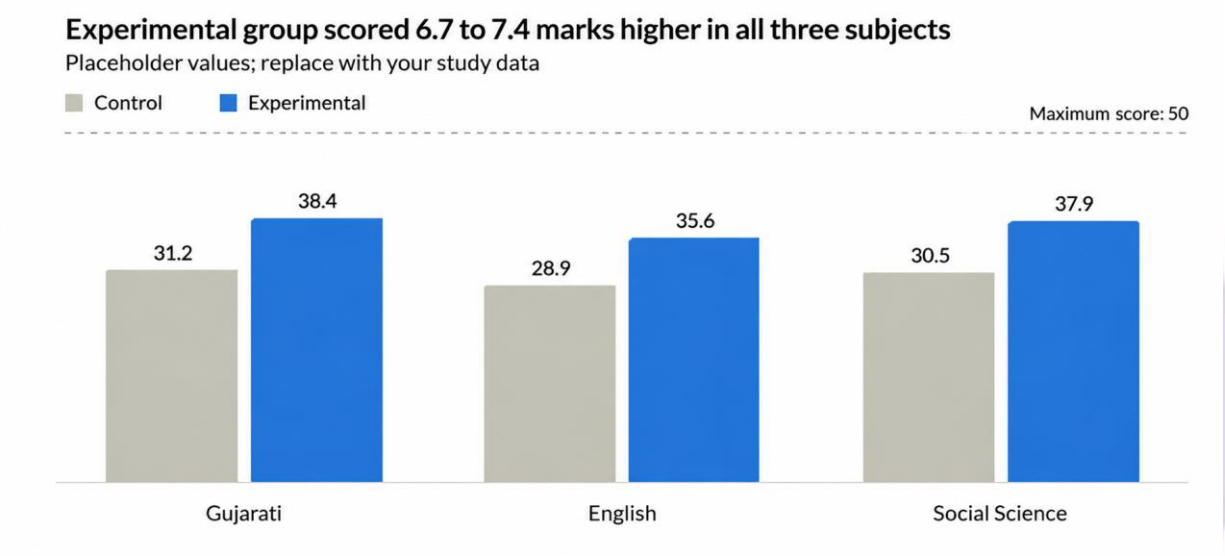


Figure 1. Post-test mean achievement scores by subject (max. 50); illustrative placeholder values, replace with study data

Table 4 shows the improvement from pre-test to post-test. Both groups improved, as would be expected from a period of instruction, but the experimental group gained roughly twice as much as the control group in each subject.

Table 4. Mean gain from pre-test to post-test

Subject	Experimental gain	Control gain
Gujarati	14.3	7.4
English	13.9	7.0
Social Science	14.9	7.9

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7. Discussion

The results show that students taught through educational drama achieved significantly higher scores than those taught conventionally in all three subjects, while the groups began at the same level. This pattern supports the view that the difference at the post-test is attributable to the method of teaching rather than to initial differences.

In Gujarati, the gain can be explained by the nature of drama work. Dramatising prose and folk tales requires students to interpret character, motive and sequence, which deepens comprehension, while improvised dialogue extends vocabulary, idiom and expressive fluency. This agrees with the verbal gains reported by Podlozny (2000) and Fleming et al. (2004).

In English, the advantage of the experimental group is consistent with Krashen's (1982) argument that second-language learning is facilitated by meaningful input in a low-anxiety setting. Role-play gave students a purpose for using English and a protective mask behind which they could take linguistic risks, so that vocabulary and sentence patterns were practised in context rather than memorised in isolation.

In social science, enacting historical episodes, civic debates and economic roles turned abstract content into lived experience. Taking the perspective of another person helps students understand events as consequences of human choices, and the vivid, emotionally attached memories created by enactment are likely to have improved retention. Social science recorded the largest effect in this study, which suggests that content-heavy, abstract subjects may gain especially from experiential methods.

The findings also fit the theoretical foundations of the method. The reflective discussion after each enactment corresponds to the experiential learning cycle (Kolb, 1984), and the collaborative role work provided the social scaffolding described in sociocultural theory (Vygotsky, 1978).

8. Educational Implications

For teachers, drama can be introduced as a regular teaching strategy through short, structured activities such as role-play, hot-seating and freeze frames, each tied to a clear learning objective and followed by reflection. For teacher educators, B.Ed. and in-service programmes should include practical training in educational drama and model lesson plans for the textbooks of Standards 6 to

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8. For school leaders and policy makers, the results support the arts-integrated pedagogy advocated by the National Education Policy 2020 and suggest that time, space and training for such methods deserve priority. Finally, assessment should capture understanding and application so that the benefits of experiential methods are recognised.

9. Limitations

Because intact classes were used, random assignment was not possible, and unmeasured differences between classes may have influenced the results, although the equivalent pre-test scores reduce this concern. The sample came from a limited number of schools and a single region, and the intervention lasted twelve weeks, so generalisation should be cautious and long-term retention was not examined. The researcher-made tests, though validated, measure only the content taught. Future studies could use larger and more diverse samples, random assignment of schools, analysis of covariance to adjust for pre-test scores, delayed post-tests, and measures of motivation and classroom engagement.

10. Conclusion

The study concludes that educational drama is an effective method of improving the academic achievement of upper primary students in Gujarati language, English language and social science education. Students taught through drama-integrated lessons outperformed those taught conventionally by a substantial margin in all three subjects. Educational drama therefore deserves a place in everyday classroom practice and in teacher preparation, as a means of making learning active, meaningful and enjoyable while raising achievement.

References

Bolton, G. (1984). *Drama as education: An argument for placing drama at the centre of the curriculum*. Longman.

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Rand McNally.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Dewey, J. (1938). *Experience and education*. Macmillan.

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Fleming, M., Merrell, C., & Tymms, P. (2004). The impact of drama on pupils' language, mathematics, and attitude in two primary schools. *Research in Drama Education, 9*(2), 177–197.

Heathcote, D., & Bolton, G. (1995). *Drama for learning: Dorothy Heathcote's Mantle of the Expert approach to education*. Heinemann.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press.

Ministry of Education. (2020). *National Education Policy 2020*. Government of India.

National Council of Educational Research and Training. (2005). *National curriculum framework 2005*. NCERT.

Podlozny, A. (2000). Strengthening verbal skills through the use of classroom drama: A clear link. *Journal of Aesthetic Education, 34*(3/4), 239–275.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.