



Effectiveness of Art and Craft-Based Learning in Developing Teaching Skills among B.Ed. Students: An Experimental Study

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Abstract

Preparing competent teachers requires more than developing subject knowledge; it also involves nurturing creativity, confidence, and the ability to create meaningful learning experiences. Art and craft activities provide opportunities for hands-on learning that can strengthen these professional competencies among pre-service teachers. The present study examined the effectiveness of an Art and Craft-Based Learning Programme in enhancing the teaching skills of B.Ed. students.

A pre-test–post-test equivalent group experimental design was adopted for the investigation. Sixty B.Ed. students from teacher education colleges in Yavatmal Dist. Yavatmal (Maharashtra) were selected through simple random sampling. The participants were divided equally into an experimental group (30 students) and a control group (30 students). The experimental group participated in an eight-week Art and Craft-Based Learning Programme, whereas the control group continued with the conventional instructional approach.

Teaching skills were assessed using the Teaching Skills Observation Scale (TSOS) developed and standardized by the investigator. The collected data were analyzed using descriptive statistics (Mean and Standard Deviation) and the independent and paired sample *t*-tests.

The analysis revealed that both groups were similar in teaching skills before the intervention. After the programme, the experimental group showed a marked improvement in lesson planning, classroom communication, use of teaching-learning materials, classroom management, questioning techniques, and teaching confidence, while the control group exhibited only marginal improvement. The findings demonstrate that art and craft-based learning provides meaningful experiential opportunities that strengthen professional teaching competencies. The study recommends greater integration of art-based pedagogical practices into B.Ed. programmes to support the objectives of the National Education Policy (2020) and to prepare creative, reflective, and learner-centred teachers.

Introduction

The quality of any education system largely depends on the quality of its teachers. Teacher education, therefore, has the important responsibility of preparing future teachers who are knowledgeable, creative, confident, and capable of responding to the changing needs of learners. In today's classrooms, teachers are expected not only to deliver subject content but also to motivate students, encourage participation, and create meaningful learning experiences. These expectations have shifted teacher education from traditional lecture-oriented training to more interactive and experiential approaches.

Among the various learner-centered approaches, art and craft-based learning has gained considerable attention because it actively involves learners in the teaching-learning process. Through drawing, model making, chart preparation, paper crafts, educational displays, and other creative activities, student teachers develop the ability to communicate concepts more effectively while enhancing their own creativity and confidence. Such experiences encourage reflection, collaboration, problem-solving, and innovation, all of which are essential qualities of an effective teacher.

The National Education Policy (2020) strongly advocates experiential and art-integrated learning as an important means of promoting holistic education. It encourages teacher education institutions to prepare teachers who can integrate artistic experiences into classroom instruction across different subjects. Art integration makes learning more engaging, meaningful, and enjoyable while helping teachers address diverse learning styles and classroom situations.

Teaching skills consist of several interconnected competencies, including lesson planning, classroom communication, instructional presentation, questioning techniques, use of teaching-learning materials, classroom management, assessment, and reflective practice. These competencies are developed more effectively when student teachers are actively involved in practical learning experiences rather than relying solely on theoretical instruction. Although the educational value of art-integrated learning has been widely acknowledged, its systematic use in many B.Ed. colleges remains limited. Teacher education programmes continue to depend heavily on conventional classroom teaching, leaving relatively few opportunities for structured creative activities. Keeping this gap in view, the present study investigates whether a planned Art and Craft-Based Learning Programme can significantly improve the teaching skills of B.Ed. students studying in teacher education colleges of Yavatmal Dist. Yavatmal (Maharashtra).

Need and Significance

The educational reforms introduced through the National Education Policy (2020) have increased the demand for teachers who can make classroom learning creative, participatory, and meaningful. As a result, teacher education institutions need to provide opportunities that allow future teachers to learn through experience rather than depending only on lectures and theoretical discussions. Art and craft activities offer such opportunities by encouraging student teachers to prepare teaching-learning materials, express ideas creatively, work collaboratively, and develop confidence in classroom teaching. Since limited research has examined the effectiveness of structured art and craft programmes in B.Ed. colleges of Yavatmal Dist. Yavatmal (Maharashtra), the present study attempts to provide empirical evidence that may help teacher educators, curriculum planners, and policy makers strengthen art-integrated teacher education.

Objectives of the Study

The present study was conducted with the following objectives:

To study the effectiveness of the Art and Craft-Based Learning Programme in developing the teaching skills of B.Ed. students.

To compare the pre-test and post-test teaching skills of the experimental group.

To compare the pre-test and post-test teaching skills of the control group.

To compare the post-test teaching skills of the experimental and control groups after the implementation of the Art and Craft-Based Learning Programme.

Hypotheses of the Study

The following null hypotheses were formulated and tested at the **0.05 level of significance**.

There is no significant difference between the mean pre-test teaching skill scores of the experimental and control groups.

There is no significant difference between the mean pre-test and post-test teaching skill scores of the experimental group.

There is no significant difference between the mean pre-test and post-test teaching skill scores of the control group.

There is no significant difference between the mean post-test teaching skill scores of the experimental and control groups.

Tool of investigation

The **Teaching Skills Observation Scale (TSOS)**, developed by the investigator, was used as the primary research tool to assess the teaching skills of B.Ed. students.

Art and Craft-Based Learning program /schedule

Statistical Techniques Used

The collected data were analyzed using both descriptive and inferential statistics.

Mean (M)

Standard Deviation (SD)

Samples *t*-test

Table 1**Comparison of Pre-test Teaching Skill Scores of Experimental and Control Groups**

Group	N	Mean	SD	t-value	p-value	Result
Experimental	30	42.87	4.21	0.34	0.736	Not Significant
Control	30	42.50	4.18			

Interpretation

The calculated *t*-value (0.34) is not significant at the 0.05 level ($p > 0.05$). Hence, the null hypothesis is **accepted**. This indicates that there was no significant difference between the pre-test teaching skill scores of the experimental and control groups. Therefore, both groups were equivalent before the implementation of the Art and Craft-Based Learning Programme.

Table 2**Comparison of Pre-test and Post-test Teaching Skill Scores of the Experimental Group**

Group	N	Mean	SD	t-value	p-value	Result
Pre-test	30	42.87	4.21	12.64	<0.001	Significant
Post-test	30	61.10	3.86			

Interpretation

The calculated paired *t*-value (12.64) is significant at the 0.05 level ($p < 0.001$). Hence, the null hypothesis is **rejected**. The Art and Craft-Based Learning Programme significantly improved the teaching skills of B.Ed. students in the experimental group

Table 3**Comparison of Pre-test and Post-test Teaching Skill Scores of the Control Group**

Group	N	Mean	SD	t-value	p-value	Result
Pre-test	30	42.50	4.18	1.82	0.079	Not Significant
Post-test	30	44.03	4.35			

Interpretation

The calculated paired t -value (1.82) is not significant at the 0.05 level ($p > 0.05$). Hence, the null hypothesis is **accepted**. Conventional teaching methods did not produce a statistically significant improvement in the teaching skills of the control group

Table 4

Comparison of Post-test Teaching Skill Scores of Experimental and Control Groups

Group	N	Mean	SD	t-value	p-value	Result
Experimental	30	61.10	3.86	15.72	<0.001	Significant
Control	30	44.03	4.35			

Interpretation

The calculated t -value (15.72) is significant at the 0.05 level ($p < 0.001$). Hence, the null hypothesis is **rejected**. The post-test teaching skill scores of the experimental group were significantly higher than those of the control group. This indicates that the Art and Craft-Based Learning Programme was more effective than the conventional teaching method in developing teaching skills among B.Ed. students.

Major Findings

Before the intervention, both the experimental and control groups possessed almost identical levels of teaching skills, indicating that the two groups were comparable.

Students who participated in the Art and Craft-Based Learning Programme showed substantial improvement in their teaching competencies after the intervention.

Students who learned through conventional teacher education methods demonstrated only a slight improvement, which was not statistically significant.

The experimental group achieved significantly better post-test scores than the control group, clearly indicating the effectiveness of the intervention.

Overall, regular engagement in creative art and craft activities helped student teachers become more confident, innovative, and effective in classroom teaching.

Conclusion

The findings of the present investigation clearly indicate that the Art and Craft-Based Learning Programme made a meaningful contribution to the professional development of B.Ed. students. Although both groups began the study with nearly the same level of teaching skills, the students who participated in the art and craft activities demonstrated remarkable improvement by the end of the programme. Their progress was reflected in better lesson planning, more effective classroom communication, greater confidence during teaching,

improved classroom management, and creative use of teaching-learning materials. The programme also encouraged collaborative learning, reflective thinking and innovative instructional practices, making the teaching-learning process more engaging and learner-centred.

In comparison, students who followed the conventional approach showed only limited improvement in their teaching performance. These findings suggest that carefully planned art and craft activities can serve as valuable pedagogical tools in teacher education. Incorporating such experiential learning opportunities into the B.Ed. curriculum would help prepare future teachers who are creative, competent, adaptable, and capable of meeting the expectations of twenty-first-century classrooms. The study therefore supports the vision of the National Education Policy (2020), which advocates experiential, competency-based, and art-integrated teacher education for improving the quality of school education.

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