



Research Paper

## Effectiveness Of District Centre for English (DCE) Training for Improving Language Proficiency of Upper Primary English Teachers

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### Abstract

This study investigates the effectiveness of the District Centre for English (DCE) training programme in enhancing the English language proficiency of upper primary English teachers. Using a quantitative approach, the study assessed the language proficiency levels of teachers both before and after undergoing the DCE training. Percentage analysis revealed that 20% of the teachers initially exhibited a low level of English language proficiency, 64% had a moderate level, and only 16% demonstrated a high level of proficiency. To measure the impact of the DCE training, a pre-test and post-test design was employed. The calculated t-value of 12.72 for the difference between pre-test and post-test scores was found to be significant at the 0.01 level, indicating a statistically significant improvement in language proficiency following the training. This affirms the effectiveness of the DCE programme in improving English language skills among upper primary teachers. Additionally, analysis of gender differences in post-test scores showed a t-value of 0.36, which is not significant at the 0.05 level. This suggests that there is no significant difference between male and female teachers in terms of gains in language proficiency, indicating that the training was equally effective across genders. These findings underscore the value of structured language training initiatives like the DCE in building teacher capacity and improving language instruction at the primary level.

**Keywords:** District Center for English, Language Proficiency, Upper Primary English Teachers

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### I. Introduction

The quality of education is closely tied to the proficiency of teachers, especially in subjects like English, where language skills are fundamental. In Kerala, the importance of improving the language proficiency of Upper Primary English teachers has been recognized as a critical factor in enhancing the overall effectiveness of English language education. The District Centre for English (DCE) plays a pivotal role in this endeavor by offering specialized training programs aimed at enhancing the English language proficiency of teachers. This study investigates the effectiveness of the DCE training program in improving the language skills of Upper Primary English teachers in the Alappuzha district.

The significance of teacher proficiency in English cannot be overstated, particularly in the context of Kerala, where English is a second language for most students. Effective English instruction requires teachers who are not only knowledgeable in the subject matter but also proficient in using the language fluently and accurately. The DCE training program is designed to address this need by providing intensive, targeted training to teachers, with the goal of enhancing their language proficiency and, consequently, their teaching effectiveness.

This study employs a single group pre-test treatment post-test design to measure the impact of the DCE training on the English language proficiency of Upper Primary English teachers. By comparing the teachers' proficiency levels before and after the training, the study aims to determine whether the training has led to significant improvements. Additionally, the study explores whether gender plays a role in the effectiveness of the training, examining differences in proficiency improvements between male and female teachers.

The significance of this study lies in its potential to provide empirical evidence on the impact of targeted professional development on teachers' language proficiency. Despite the widespread implementation of training programs like DCE, there is a lack of comprehensive studies that systematically assess their effectiveness. This research fills that gap by employing a rigorous pre-test and post-test design to measure the improvements in language proficiency among Upper Primary English teachers who have undergone the DCE training. The findings of this study could help in refining the training programs to better meet the needs of teachers and, by extension, improve the quality of English language education provided to students. Furthermore, this study is significant as it explores whether the effectiveness of the DCE training varies based on gender. Understanding whether male and female teachers benefit equally from the training can inform the design of future programs, ensuring they are equitable and effective for all participants. By identifying potential disparities in training outcomes, this research can contribute to the development of more inclusive training strategies that cater to the diverse needs of all teachers, regardless of gender.

To achieve these objectives, the study utilizes an English Language Proficiency Test developed by the investigator. This tool is designed to accurately assess the language skills of the teachers before and after the training. The sample for the study consists of 50 Upper Primary English teachers from the Alappuzha district, representing a diverse cross-section of the population of English teachers in Kerala. Statistical analyses, including paired samples t-tests and independent samples t-tests, are conducted using the EDUSTAT software to determine the significance of the observed changes in proficiency levels.

The findings of this study are expected to provide valuable insights into the effectiveness of the DCE training program and its potential impact on English language education in Kerala. By identifying the factors that contribute to improved language proficiency among teachers, the study aims to inform future training initiatives and contribute to the ongoing efforts to enhance the quality of English education in the region.

### **Hypotheses of the study**

1. There is significant difference between the pre-test and post test scores of English Language Proficiency for the treatment group.
2. There is significant difference between male teachers and female teachers in Post test scores of English Language Proficiency.

### **Objectives of the study**

1. To find out the level of English Language Proficiency of Upper Primary English Teachers.
2. To test whether there is a significant improvement in the English language proficiency of Upper Primary English teachers after undergoing DCE training.
3. To test whether there is a significant difference in the English language proficiency of Upper Primary English teachers in Kerala who has undergone DCE training based on gender.

## **II. Methodology**

Experimental method was used for this study. The present study aims to find out the Effectiveness of District Centre for English (DCE) Training for improving Language Proficiency of Upper Primary English Teachers. The present study is consisting of three variables such as DCE training program and English Language proficiency. DCE training program is the independent variable and English Language proficiency is the dependent variables. This study intends to find out the Effectiveness of District Centre for English (DCE) Training for improving Language Proficiency of Upper Primary English Teachers. The investigator prepared English Language Proficiency Test in consultation with the supervising teacher. The split half approach was used to evaluate the English Language Proficiency Test's dependability. The English Language Proficiency Test draft form was divided into even and odd-numbered items. Using Pearson Product Moment Correlation Analysis, the scores on the odd-numbered items are co-related to the scores on the even-numbered items. The reliability coefficient (0.7;  $p < 0.01$ ) indicates that the obtained coefficient of correlation is significant at the 0.01 level. The scale's significant positive reliability coefficient demonstrated its dependability.

The study was conducted using a single group pre-test treatment post-test design. First, 50 Upper Primary English teachers from 50 schools in Alappuzha district in Kerala were selected (Appendix E). Before the intervention, the English language proficiency of these teachers was assessed using a standardized test developed by the investigator. The teachers then underwent the District Centre for English (DCE) training program, which focused on enhancing their language proficiency through targeted instructional sessions. After the completion of the training, the same proficiency test was administered as a post-test to evaluate any changes in their language skills. The data collected from the pre-test and post-test were analysed using paired samples t-tests to assess the effectiveness of the training. Additionally, independent samples t-tests were used to determine whether gender influenced the outcomes of the training. All statistical analyses were performed using the

EDUSTAT software.

### III. Result

**Table.1**

*DescriptivestatisticsofPretestscoresofEnglishLanguageProficiencyofUpper Primary English teachers*

N	Mean	Standard deviation		Skewness	Kurtosis
		Median	Mode		
50	25.08	25.5	28	3.24	-0.06

The mean, median and mode for the Pre-test scores of English Language Proficiency of Upper Primary English teachers are obtained as 25.08, 25.5, and 28 respectively. The values of Skewness and Kurtosis are obtained as -0.06and

-1.19 respectively. The values of skewness and kurtosis suggest that the Pretest scores of English Language Proficiency of Upper Primary English teachers is slightly negatively skewed and platykurtic.

**Table.2**

*DescriptivestatisticsofPosttestscoresofEnglishLanguageProficiencyofUpper Primary English teachers*

N	Mean	Median		Standard deviation	Skewness	Kurtosis
		Mode				
50	37.3	39	29	5.5	-0.24	-1.42

The mean, median and mode for the Post test scores of English Language Proficiency of Upper Primary English teachers are obtained as 37.3, 39, and 29 respectively. The values of Skewness and Kurtosis are obtained as -0.24 and -1.42 respectively. The values of skewness and kurtosis suggest that the Post test scores of English Language Proficiency of Upper Primary English teachers is slightly negatively skewed and platykurtic.

**Table.3**

*Mean and standard deviation of English Language Proficiency of Upper Primary English teachers*

Variable	N	Standard Mean(M)	deviation (SD)
English Language Proficiency	50	25.08	3.24

The mean (M) of the English Language Proficiency of Upper Primary English teachers is 25.08 and the standard deviation (SD) is 3.24. The whole sample was classified into Upper Primary English teachers having high, moderate and low levels of English Language Proficiency based on mean and Standard deviation. The respondents who got score greater than (M+SD) i.e.

28.32 are classified into Upper Primary English teachers having high level of English Language Proficiency, those who got score less than(M-SD) i.e. 21.84 are classified into Upper Primary English teachers having low level of English Language Proficiency and those who got score in between (M+SD) i.e. 28.32 and (M-SD) i.e. 21.84 are classified into Upper Primary English teachers having moderate level of English Language Proficiency. The number and percentage of Upper Primary English teachers having high, moderate and low level of English Language Proficiency is given in the following table.

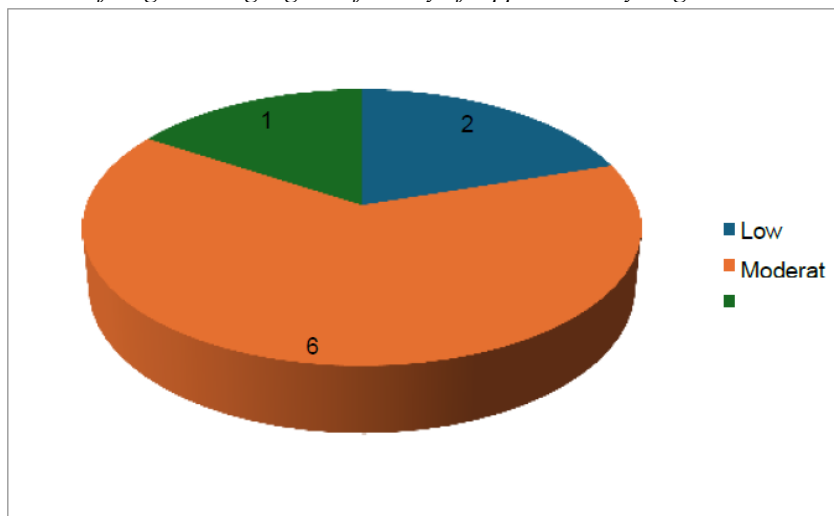
**Table.4**

*Level of English Language Proficiency of Upper Primary English teachers*

Level of English Language Proficiency	N	Percentage
Low	10	20
Moderate	32	64
High	8	16

From the table it is clear that 20% of Upper Primary English teachers have low level of English Language Proficiency. 64% of Upper Primary English teachers have moderate level of English Language Proficiency. 16% of Upper Primary English teachers have high level of English Language Proficiency.

**Figure.1**  
*Level of English Language Proficiency of Upper Primary English teachers*



## TESTING OF HYPOTHESIS

This section deals with the testing of hypotheses formulated for the study using appropriate statistical techniques.

### TESTING OF HYPOTHESIS-1

**Table.5**  
*Test of significance of difference between means of pre-test and post-test scores of English Language Proficiency of the treatment group*

Assessment	Number of students	Mean	Standard deviation	Level of t significance
Pretest	50	25.08	3.24	
Posttest	50	37.3	5.5	12.72 0.01

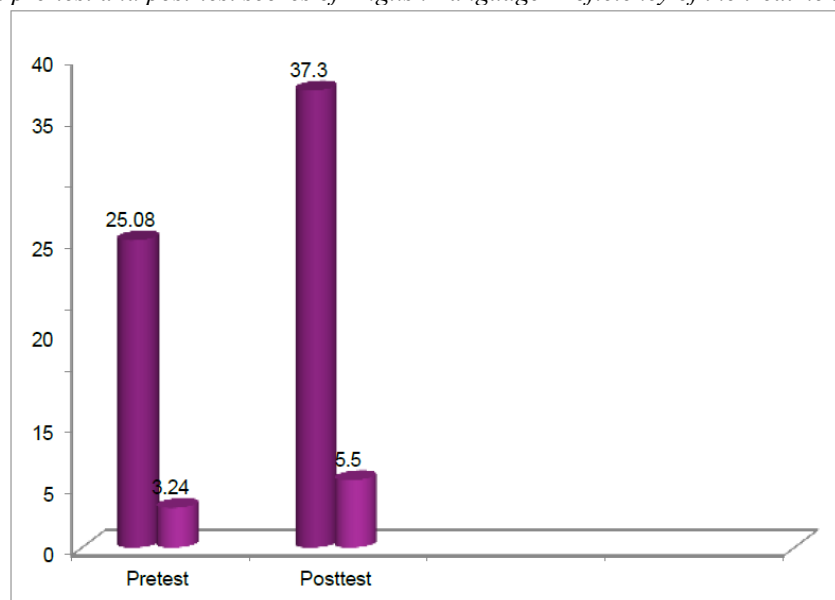
The calculated value of t is 12.72 and is significant at 0.01 level ( $t = 12.72$ ;  $p < 0.01$ ). The mean of the post-test scores of English Language Proficiency is significantly greater than that of the pre-test scores. This means that the DCE training is effective in enhancing the English Language Proficiency of the treatment group.

### Tenability of Hypothesis

Test of significance of difference between means of pre-test and post-test scores of English Language Proficiency of the treatment group revealed that there is significant difference between pre-test and post-test scores of English Language Proficiency. Hence the null hypothesis formulated in this context is rejected.

**Figure.2**

Mean pre-test and post-test scores of English Language Proficiency of the treatment group



## TESTING OF HYPOTHESIS-2

**Table.6**

Test of significance of difference between means of Posttest scores of English Language Proficiency of male teachers and female teachers

gender	Number	Standard deviation	Mean	t	Level of significance
Male Teachers	20				
Female Teachers	31				
	30		37	0.36	Not significant
	.07		5.		
	71		5.		

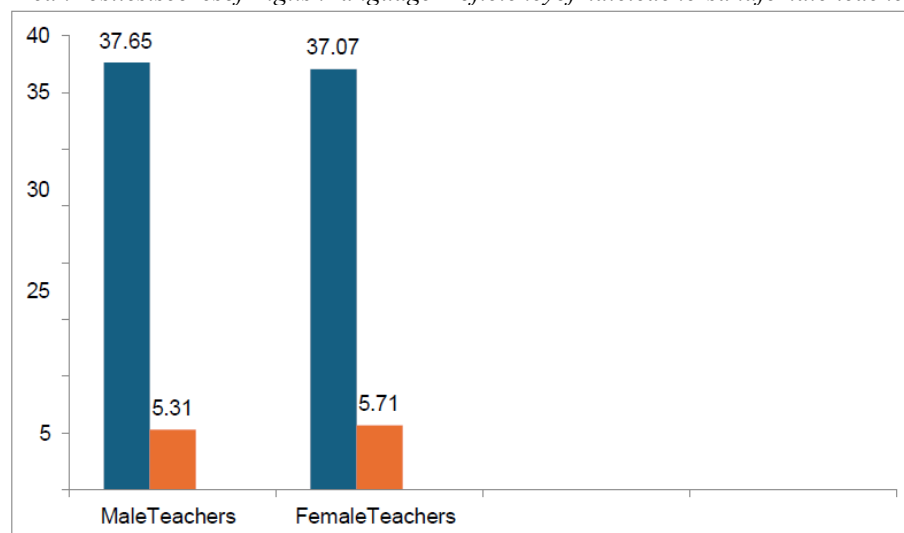
The calculated value of t is 0.36 and is not significant at 0.05 level ( $t = 0.36$ ;  $p > 0.05$ ). Since the mean of the male teachers do not differ significantly from that of the female teachers, male teachers and female teachers are more or less equal in Post test scores of English Language Proficiency.

## Tenability of Hypothesis

Test of significance of difference between means of Post test scores of English Language Proficiency of male teachers and female teachers revealed that there is no significant difference between male teachers and female teachers in Post test scores of English Language Proficiency. Hence the null hypothesis formulated in this context is not rejected.

**Figure.3**

*Mean Posttest scores of English Language Proficiency of male teachers and female teachers*



#### **IV. Discussion and conclusion**

Percentage analysis of the Level of English Language Proficiency of Upper Primary English teachers revealed that 20% of Upper Primary English teachers have low level of English Language Proficiency. 64% of Upper Primary English teachers have moderate level of English Language Proficiency and 16% of Upper Primary English teachers have high level of English Language Proficiency.

The calculated value of  $t$  for significance of difference between means of pre-test and post-test scores of the treatment group is obtained as 12.72 and is significant at 0.01 level. The mean of the post test scores of English Language Proficiency is significantly greater than that of the pre-test scores. This means that the DCE training is effective in enhancing the English Language Proficiency.

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The calculated value of  $t$  for significance of difference between means of Post test scores of English Language Proficiency of male teachers and female teachers is obtained as 0.36 and is not significant at 0.05 level. Since the mean of the male teachers do not differ significantly from that of the female teachers, male teachers and female teachers are more or less equal in Post test scores of English Language Proficiency. The study assesses the impact of DCE training on the English Language Proficiency of Upper Primary English teachers and reveals several key findings. The initial percentage analysis indicates that while 64% of teachers possess a moderate level of proficiency, 20% have a low level, and 16% have a high level of proficiency.

The intervention's effectiveness is highlighted by the significant improvement in the treatment group's English Language Proficiency post-test scores. The calculated  $t$ -value of 12.72, significant at the 0.01 level, demonstrates that the post-test scores are significantly higher than the pre-test scores, indicating that the DCE training has successfully enhanced teachers' language proficiency.

Furthermore, the analysis comparing post-test scores between male and female teachers showed no significant differences ( $t$ -value of 0.36), suggesting that the training's effectiveness is consistent across genders. Overall, the results underscore the effectiveness of the DCE training in improving English Language Proficiency among Upper Primary English teachers, regardless of gender.

The effectiveness of the District Centre for English (DCE) training for improving language proficiency

among upper primary English teachers carries significant educational implications. Enhanced language proficiency directly impacts the quality of English instruction, leading to better student outcomes in language acquisition and communication skills. As teachers improve their own fluency, accuracy, and pedagogical approaches, they become more confident in delivering content, which fosters a more engaging and effective classroom environment. This can result in improved literacy rates, better comprehension abilities, and overall academic success in English. Furthermore, such training empowers teachers to use modern teaching strategies, integrate technology in language learning, and adopt a student-centered approach that aligns with 21st-century educational standards. By strengthening teachers' language skills, DCE training supports long-term professional development and contributes to the overall improvement of English education at the upper primary level.

### References

- [1]. Adams, R., & Taylor, M. (2022). Promoting sustainable transportation choices through environmental education. *Transportation Research Part D: Transport and Environment*, 97, 49-60.
- [2]. Anderson, P., & Evans, R. (2019). Environmental education and its role in fostering student engagement in conservation activities. *Environmental Science Education Review*, 24(2), 78-90.
- [3]. Anderson, P., & Evans, R. (2022). Mathematics and energy conservation: Enhancing analytical skills through curriculum integration. *Mathematics Education Research Journal*, 27(1), 50-64.
- [4]. Anderson, P., & White, G. (2018). Naturalistic intelligence and critical thinking skills: An educational perspective. *Journal of Educational Psychology*, 110(4), 615-628.
- [5]. Armstrong, T. (2000). *Multiple Intelligences in the Classroom* (2nd ed.). ASCD.
- [6]. Armstrong, T. (2009). *Multiple Intelligences in the Classroom* (3rd ed.). ASCD.
- [7]. Armstrong, T. (2017). Applying multiple intelligences theory in classroom instruction. *Educational Leadership*, 75(1), 20-26.
- [8]. Barrett, J. L., & Reardon, T. E. (2019). Multiple intelligences and social-emotional learning: A new perspective on student development. *Journal of Educational Psychology*, 111(5), 875-888.
- [9]. Brown, K., & Patel, R. (2020). Naturalistic intelligence in middle school science education: Enhancing engagement and performance. *Science Education Journal*, 44(5), 300-315.
- [10]. Brown, R., & Green, T. (2019). Evaluating the effectiveness of educational programs in fostering naturalistic intelligence. *Environmental Education Research*, 25(5), 678-692.
- [11]. Brown, R., & Green, T. (2020). Sustainability education and dietary choices: A study of student eating habits. *Journal of Sustainable Food Systems*, 16(1), 35-50.
- [12]. Brown, T., & Johnson, M. (2018). Long-term impacts of environmental education on high school students' environmental behaviours. *Environmental Science & Policy*, 88, 24-35.
- [13]. Brown, T., & Williams, L. (2018). Longitudinal studies on naturalistic intelligence and sustainability behaviours. *Environmental Education Research*, 24(3), 245-259.
- [14]. Brown, T., Green, M., & Davis, L. (2018). High school curricula and energy conservation: Enhancing engagement and practical knowledge. *Journal of Energy Education*, 24(1), 98-112.
- [15]. Brown, T., Green, M., & Williams, S. (2020). Higher education and sustainability: The impact of environmental education on career choices and practices. *Journal of Higher Education Sustainability*, 12(1), 30-45.
- [16]. Brundtland, G. H. (1987). *Our Common Future: The World Commission on Environment and Development*. Oxford University Press.
- [17]. Carter, P., & Wilson, K. (2022). Digital tools in sustainability education: Engaging students in complex issues. *Educational Technology Research & Development*, 70(3), 345-360.