Class and Instruction Mode Impact on Students in English Subject

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Abstract: *Formative and summative assessments are two different kinds. Glazer (2014) claims that summative evaluation is typically used to provide learners with a number score and limited feedback. As a result, summative evaluation is frequently employed to assess learning rather than learning itself. By allowing students to gain knowledge via tests, educators may make summative evaluations more formative. This would entail giving students feedback on their examinations and utilizing the teaching potential of exams. The present study is on the influence of Class and medium of instruction on students in English subject. The study has been carried out with a sample of 630 school students in Kurnool district, Andhra Pradesh. The students achieved marks in formative and summative assessments conducted by Board Secondary School, Andhra Pradesh. The data is collected by evaluation or assessment method in stratified random sampling. The study's main objective is to find achievement levels among high school students of Kurnool district in English Subject and also to find out achievement levels of English and Telugu medium high school students of Kurnool district in English subject. The related hypothesisis there would be no significant difference in achievement levels among VIII, IX, and X class high school students of Kurnool district in English Subject, and also, there would be no significant difference among achievement levels of English and Telugu medium high school students of Kurnool district in English subject. The mean, SD, t - test, and F - ratio statistics are used for the study at 0.05 and 0.01 significant levels. It is found that there is no significant difference between high school students in formative assessment 1, 2, and 3 of achievement level in English Subject. Still, there is a considerable difference among VIII, IX, and X class students in summative 1, 2 and overall, in English subject. There is a significant difference between English and Telugu medium students in FA1, FA2, FA3, SA1, and SA2 in English subjects of VIII, IX, and X class students. Still, there is a significant difference between IX and X in FA1 and FA2, and FA3.*

Keywords: Class, Medium, Formative, Summative, Assessment, English, Significant

1. Introduction

The ability to acquire, use, or apply English in diverse circumstances, both verbally and in writing, is referred to as English as a skill (Chang, 2011; Tsou & Chen, 2019). English is not only recognized as a global language that can open up many chances for those who master it in the twenty - first century but also as a foreign tongue that should be avoided. An objective and thorough literacy measurement system should be used to help schools and other educational institutions prepare their students to learn English abilities. This increases the idea that language literacy can be measured and evaluated across all circles using a consistent framework. On the other hand, research demonstrates that determining a person's level of English literacy needs to be modified to various groups of students' characteristics, such as their age and language acquisition (Hartman, Nicolarakis, & Wang, 2019; Paepe, ZHu, & Depryek, 2018). Based on the overarching theoretical framework, mastery of English skills or literacy may generally be divided into a number of groups. There are four levels of English competency, according to the American Council on the Teaching of Foreign Languages (ACTFL): beginner, intermediate, advanced, and advanced (Sandrock, Swender, Cowles, Martin, & Vicars, 2015). The CEFR, however, categorizes English proficiency into six levels: beginner, basic, intermediate down, medium up, advanced, and expert (Unit, 2011). In essence, many groupings all pertain to the same idea, and each set includes a description of the degree to which language proficiency is attained for each level. The distinction in how these categories are grouped is more based on the requirements or specifics of the level division and the descriptions that follow (ACTFL, 2015). The current levels of the CEFR are more often employed in a variety of contexts and assessments of English competence. There are various reasons for this. The first is that the scope of it can represent all English skills.

2. Methodology

In the present study, a stratified random sample technique is applied with a sample size of 630 students in the Kurnool district. The data is collected by using the evaluation or assessment method. The total data was collected from 6 high schools of Kurnool district, Andhra Pradesh (2 government, 2aided and two private), and 105 students from VIII, IX, and X classes in each school. The study was conducted in the Telugu state, i. e., Andhra Pradesh. The state is geographically divided into three regions. They are Rayalaseema, Coastal, and Northern Andhra. Presently there are 26 districts in Andhra Pradesh. As for education and economy, the Andhra region stands first with an average level of education and economy.
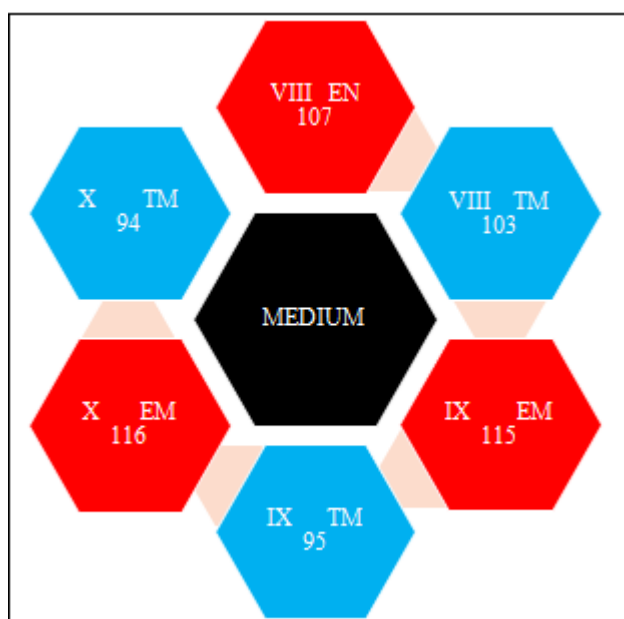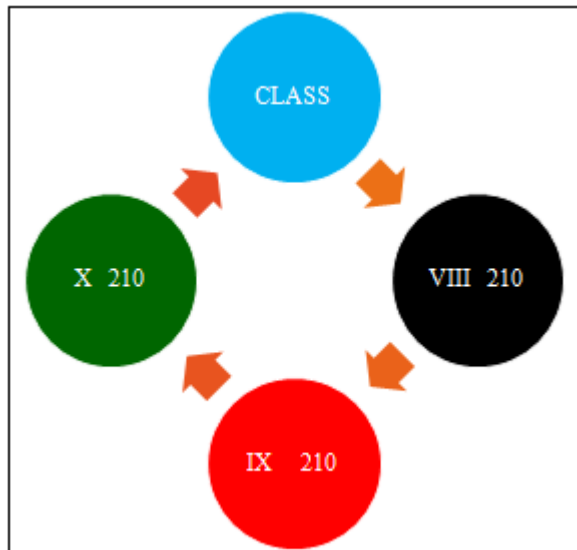
Figure 1: Sample structure

Tools
- Formative and summative Question papers preppers Board of secondary school, Andhra Pradesh.
- Formative each for 20 marks, and two summative assessments are conducted for 80 marks.
- Personal data sheet.

Objectives of the study
The main aim of the study is
- To study the correlation and achievement levels amongKurnool district high school students in English Subject.
- To find out achievement levels of English and Telugu medium high school students of Kurnool district in English subject

Hypothesis of the study:
- There would be no significant difference in achievement levels among the Kurnool district's VIII, IX, and X class high school students in English Subject.
- There would be no significant difference among on achievement levels of English and Telugu medium high school students of the Kurnool district in English subject.

Statistical techniques used
The data thus collected and scored was analyzed by using relevant statistical techniques like Mean, Standard Deviation, and t – test. . The normal levels of significance, viz., 0.05, and 0.01were used to test the importance of the obtained statistics.
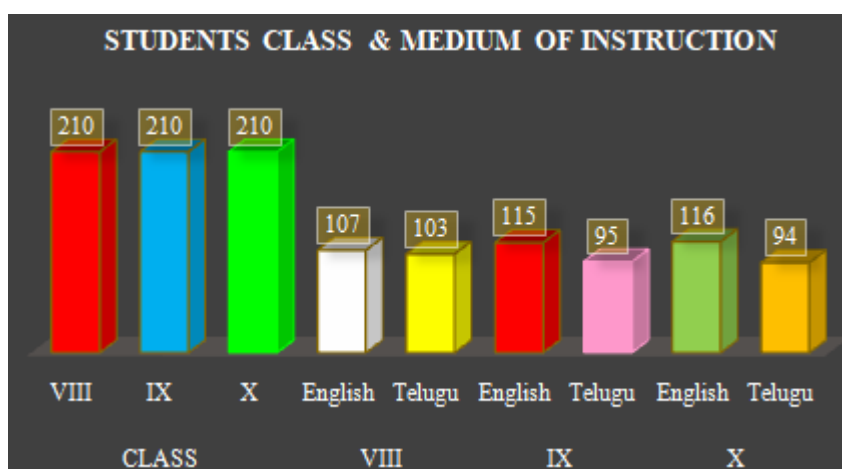

Figure 2: Sample size of high school students concerning their Class and medium of instruction

3. Results and Discussion

Table 1: ANOVA of Achievement levels of high school students according to their Class.

Class		Sum of Squares	df	Mean Square	F –ratio value
FA1	Between Groups	52.610	2	26.305	1.654[at]
	Within Groups	9974.376	627	15.908	
	Total	10026.986	629		
FA2	Between Groups	20.556	2	10.278	0.736[at]
	Within Groups	8751.510	627	13.958	
	Total	8772.065	629		
FA3	Between Groups	27.927	2	13.963	1.257[at]
	Within Groups	6967.400	627	11.112	
	Total	6995.327	629		
SA1	Between Groups	5783.010	2	2891.505	17.376**
	Within Groups	104336.076	627	166.405	
	Total	110119.086	629		
SA2	Between Groups	7504.689	2	3752.344	27.406**
	Within Groups	85845.643	627	136.915	
	Total	93350.332	629		
TOTAL	Between Groups	18736.498	2	9368.249	8.638**
	Within Groups	679993.876	627	1084.520	
	Total	698730.375	629		

Table 2: Means, SDs, and t - values of Achievement levels of high school students according to their Class

S. No	Types of Assessment	Class	N	Intensity scores		t - value
				Mean	SD	
1 2	Formative Assessment 1	VIII	210	13.62	4.12	t_{12} =1.0197[at]
		IX	210	14.03	4.12	t_{23} =1.8580[at]
		X	210	13.32	3.70	t_{31} =0.7850[at]
2	Formative Assessment - 2	VIII	210	14.00	3.67	t_{12} =0.6556[at]
		IX	210	14.73	3.83	t_{23} =0.9882[at]
		X	210	13.88	3.68	t_{31} =0.3256[at]
3	Formative Assessment - 3	VIII	210	14.62	3.62	t_{12} =1.4576[at]
		IX	210	15.13	3.26	t_{23} =0.9370[at]
		X	210	14.84	3.08	t_{31} =0.6707[at]
4	Summative Assessment - 1	VIII	210	61.77	12.60	t_{12} =1.3211[at]
		IX	210	63.40	13.20	t_{23} =5.0458**
		X	210	68.87	15.38	t_{31} =5.2643**
5	Summative Assessment - 2	VIII	210	64.40	9.91	t_{12} =1.7362[at]
		IX	210	65.78	9.92	t_{23} =5.1919**
		X	210	72.11	14.62	t_{31} =6.5723**
6	Overall	VIII	210	168.12	30.57	t_{12} =1.5735[at]
		IX	210	172.73	29.50	t_{23} =2.5731**
		X	210	181.29	38.50	t_{31} =3.9091**

[at]not significant at the rate of 0.05

The fraction value of VIII, IX, and X class students in formative assessment test 1 is 1.654, as shown in Table 1, which is not significant at 0.05 level. Hence the hypothesis is accepted. There is no significant difference among the students of VIII, IX, and X in formative test 1. It is also found that from Tables1 and 2, the mean value of IX class students is higher than the VIII and X class students. In FA1, the Fraction value of VIII, IX, and X class students in formative assessment test 2 is 0.736, as shown in table 4.1.1, which is insignificant at 0.05 level; hence the hypothesis is accepted. There is no significant difference among VIII, IX, and X class students in formative test 2. It is also found that from Table 4.1.2, the mean value of IX class students is higher than the VIII and X class students. In FA2, The Fraction value of VIII, IX, and X class students in formative assessment test 3 is 1.257, as shown in table 4.1.1, which is insignificant at 0.05 level; hence the hypothesis is accepted. There is no significant difference among VIII, IX, and X class students in formative test 3. It is also found that from

Table 4.1.2, the mean value of IX class students is higher than the VIII and X class students. In FA3, The F - ratio value of VIII, IX, and X class students in summative assessment test 1 is 17.376, as shown in table 4.1.1, which is significant at 0.01 level; hence the hypothesis is accepted. There is a considerable difference among VIII, IX, and X class students in summative test 1. To know the exact significant difference among these classes, the t - test isemployed, and the t values are tabulated in Table 4.1.2. The t - value of VIII, IX class is 1.321, which is insignificant at 0.05 levels; hence the hypothesis is accepted. Therefore, there is no significant difference between VIII and IX class students in SA1. The t - value of IX and X class is 5.0458, which is important at 0.01 levels; hence the hypothesis is rejected. Therefore, there is a significant difference between IX and X class students in SA1. The t - value of VIII and X class is 5.2643, which is important at 0.01 levels; hence the hypothesis is rejected. Therefore, there is a significant difference between IX and X class students in SA1.

The F - ratio value of VIII, IX, and X class students in summative assessment test 2 is 27.406, as shown in table 4.1.1, which is significant at 0.01 level; hence the hypothesis is accepted. There is a considerable difference among VIII, IX, and X class students in summative test 2. To know the exact significant difference among these classes, the t - test is employed, and the t values are tabulated in Table 4.1.2. The t - value of the VIII, IX class is 1.7365, which is insignificant at 0.05 levels; hence the hypothesis is accepted. Therefore, there is no significant difference between VIII and IX class students in SA2. The t - value of IX and X class is 5.1919, which is important at 0.01 levels; hence the hypothesis is rejected. Therefore, there is a significant difference between IX and X class students in SA2. The t - value of VIII and X class is 6.5723, effective at 0.01 levels; hence, the hypothesis is rejected. Therefore, there is a significant difference between IX and X class students in SA2.

The F - ratio value of VIII, IX, and X class students overall is 8.638, as shown in table 4.1.1, which is significant at 0.01 level; hence the hypothesis is accepted. There is a substantial difference among the overall VIII, IX, and X class students. To know the exact significant difference among these classes, the t - test is employed, and the t values are tabulated in Table 4.1.2. The t - value of the VIII, IX class is 1.573, which is insignificant at 0.05 levels; hence the hypothesis is accepted. Therefore, there is no significant difference between VIII and IX class students overall. The t - value of IX and X class is 2.5731, which is effective at 0.01 levels; hence the hypothesis is rejected. Therefore, overall, IX and X class students are significantly different. The t - value of VIII and X class is 3.9094, which is effective at 0.01 levels; hence the hypothesis is rejected. Therefore, there is a significant difference between IX and X class students overall.

Hence it is concluded that There is no significant difference between high school students in formative assessments 1, 2, and 3 of achievement level in English Subject. Still, there is a considerable difference among VIII, IX, and X class students in summative 1, 2, and overall in English subject.
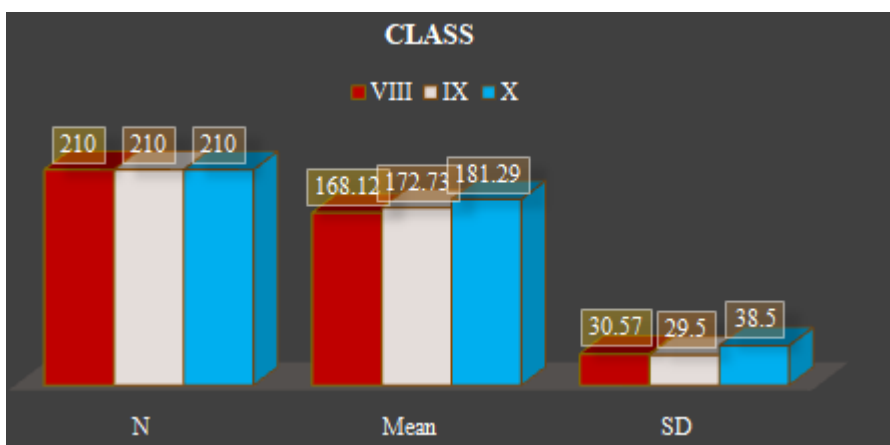

Figure 3: Mean SD's values of achievement levels of high school students according to their Class.

Hypothesis
There would be no significant difference in achievement levels of English and Telugu medium high school students of Kurnool district in English subject.

Table 3: Means, SDs, and t - values of high school students' achievement levels according to their instruction medium.

Assessment	Class	Medium	N	Mean	Std. Deviation	t value
FA 1	VIII	English	107	14.8131	4.31131	4.464**
		Telugu	103	12.3883	3.53479	
	IX	English	115	14.1638	4.42118	0.517[at]
		Telugu	95	13.8723	3.74807	
	X	English	116	13.3913	3.79680	0.271[at]
		Telugu	94	13.2526	3.59955	
FA 2	VIII	English	107	14.9533	3.75772	3.947**
		Telugu	103	13.0194	3.33720	
	IX	English	115	14.3707	3.92213	0.237[at]
		Telugu	95	14.2447	3.75224	
	X	English	116	14.1478	3.84854	1.144[at]
		Telugu	94	13.5684	3.47836	
FA 3	VIII	English	107	15.4019	3.66230	3.248**
		Telugu	103	13.8155	3.41493	
	IX	English	115	15.4310	3.24700	1.447[at]
		Telugu	95	14.7766	3.27307	
	X	English	116	15.3739	3.04199	2.758**
		Telugu	94	14.2105	3.03839	
SA 1	VIII	English	107	64.7757	13.31711	3.817**
		Telugu	103	58.6505	9.72435	

	IX	English	115	66.6983	9.77060	5.042**
		Telugu	95	59.4787	10.76706	
	X	English	116	75.1826	14.49052	7.395**
		Telugu	94	61.2421	12.80352	
SA 2	VIII	English	107	67.5607	10.17227	5.517**
		Telugu	103	60.5146	8.27216	
	IX	English	115	68.8966	8.59765	5.295**
		Telugu	95	61.9362	10.15240	
	X	English	116	78.8087	12.05535	8.334**
		Telugu	94	64.0211	13.34723	
Total	VIII	English	107	177.5047	33.89728	4.792**
		Telugu	103	158.3883	23.08349	
	IX	English	115	179.5603	28.09651	3.834**
		Telugu	95	164.3085	29.17210	
	X	English	116	196.9043	35.10410	7.365**
		Telugu	94	162.3895	32.65008	

The achievement level of English medium and Telugu medium high school students are calculated using a sample of 630. Still, for VIII class 107 English medium and 103Telugu medium, IX class 115 English medium and 95 Telugu medium are taken as and similarly X class 116 English medium and 94 Telugu medium are taken shown in table 4.2.

The achievement level of English medium and Telugu medium high school students are calculated using a sample of 630. Still, for VIII class 107 English medium and 103Telugu medium, IX class 115 English medium and 95 Telugu medium are taken as and similarly X class 116 English medium and 94 Telugu medium are taken shown in table 4.2.

1) In formative assessment 1, the t - value of VIII class students is 4.464, which is significant at a 0.01 level; hence the hypothesis is rejected. Therefore, there is a significant difference between English medium and Telugu medium students in English subject of VIII class students in FA1. `The t - value of IX class students is 0.0517, which is insignificant at a 0.05 level; hence the hypothesis is accepted. Therefore, there is no significant difference between English medium and Telugu medium students in English subject of IX class students in FA 1. The t - value of X class students is 0.2714, which is insignificant at a 0.05 level; hence the hypothesis is accepted. Therefore, there is no significant difference between English medium and Telugu medium students in English subject of X class students in FA1.

2) In formative assessment 2, the t - value of VIII class students is 3.947, which is significant at a 0.01 level; hence the hypothesis is rejected. Therefore, there is a significant difference between English medium and Telugu medium students in English subject of VIII class students in FA2. The t - value of IX class students is 0.237, which is insignificant at a 0.05 level; hence the hypothesis is accepted. Therefore, there is no significant difference between English medium and Telugu medium students in English subject of IX class students in FA 2. The t - value of X class students is 1.144, which is insignificant at a 0.05 level; hence the hypothesis is accepted. Therefore, there is no significant difference between English medium and Telugu medium students in English subject of X class students in FA2.

3) In formative assessment 3, the t - value of VIII class students is 3.248, which is significant at a 0.01 level; hence the hypothesis is rejected. Therefore, there is a significant difference between English medium and Telugu medium students in English subject of VIII class students in FA3. The t - value of IX class students is 1.447, which is insignificant at a 0.05 level; hence the hypothesis is accepted. Therefore, there is no significant difference between English medium and Telugu medium students in English subject of IX class students in FA 3. The t - value of X class students is 2.748, which is significant at a 0.01 level; hence the hypothesis is rejected; therefore, there is a significant difference between English medium and Telugu medium students in English subject of X class students in FA3.

4) In summative assessment 1, the t - value of VIII class students is 3.243.8178, which is significant at a 0.01 level; hence the hypothesis is rejected. Therefore, there is a significant difference between English medium and Telugu medium students in English subject of VIII class students in SA1. The t - value of IX class students is 3.817, which is insignificant at a 0.05 level; hence the hypothesis is rejected. Therefore, there is a significant difference between English medium and Telugu medium students in English subject of IX class students in SA1. The t - value of X class students is 7.39548, which is significant at a 0.01 level; hence the hypothesis is rejected. Therefore, there is a significant difference between English medium and Telugu medium students in English subject of X class students in SA1.

5) In summative assessment 2, the t - value of VIII class students is 5.517, which is significant at a 0.01 level; hence the hypothesis is rejected. Therefore, there is a significant difference between English medium and Telugu medium students in English subject of VIII class students in SA2. The t - value of IX class students is 5.295, which is significant at a 0.01 level; hence the hypothesis is rejected. Therefore, there is a significant difference between English medium and Telugu medium students in English subject of IX class students in SA2. The t - value of X class students is 8.334, which is significant at a 0.01 level; hence the hypothesis is rejected. Therefore, there is a significant difference between English medium and Telugu medium students in English subject of X class students in SA2.

6) In the overall assessment, the t - value of VIII class students is 4.792, which is significant at a 0.01 level;

hence the hypothesis is rejected. Therefore, the comprehensive evaluation shows a significant difference between English medium and Telugu medium students in English subject of VIII class students. The t - value of IX class students is 3.834, which is significant at a 0.01 level; hence the hypothesis is rejected. Therefore, there is a significant difference between English medium and Telugu medium students in English subject of IX class students in the overall assessment. The t - value of X class students is 7.365,

which is significant at a 0.01 level; hence the hypothesis is rejected. Therefore, thecomprehensive evaluation shows a significant difference between English medium and Telugu medium students in English subject classes.

7) Hence it is concluded that there is a significant difference between English and Telugu medium students in FA1, FA2, FA3, SA1, and SA2 in English subjects of VIII, IX, and X class students. Still, there is a significant difference between IX and X in FA1 and FA2, and FA3.
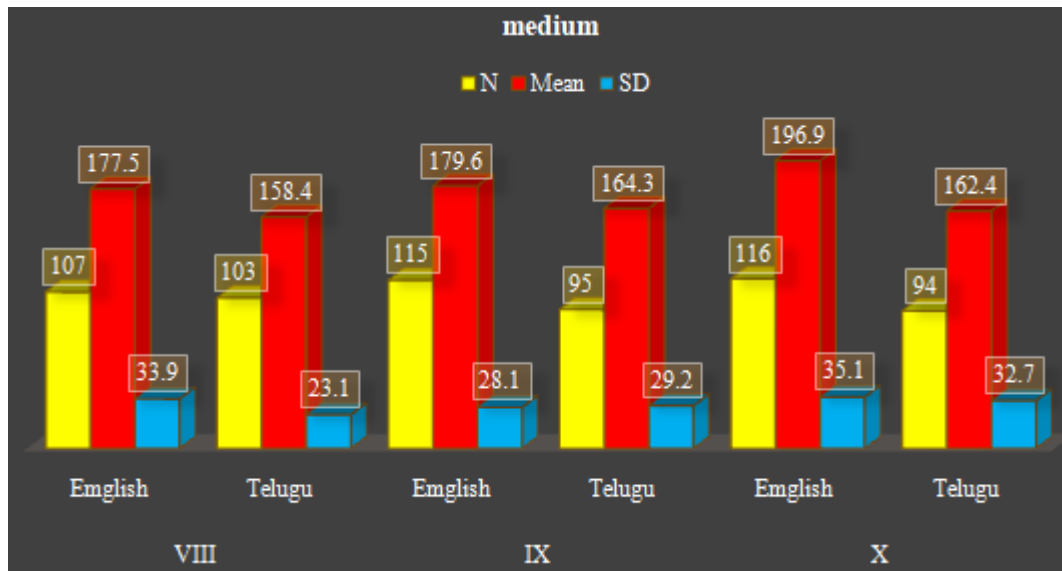

Figure 4.5: Means, SD' values of achievement levels of high school students according to their Medium

4. Conclusions

Hence it is concluded that There is no significant difference between high school students in formative assessments 1, 2, and 3 of achievement level in English Subject. Still, there is a considerable difference among VIII, IX and X class students in summative 1, 2, and overall in English subject. Also, it is found that there is a significant difference between English and Telugu medium students in FA1, FA2, FA3, SA1, and SA2 in English subjects of VIII, IX and X class students. Still, there is a significant difference between IX and X in FA1 and FA2, and FA3.

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