▪ Global Social Sciences Review (GSSR) ▪ Vol. VII, No. I (Winter 2022) ▪ Pages: 401-416
▪ DOI: 10.31703/gssr.2022(VII-I).37 ▪ URL: http://dx.doi.org/10.31703/gssr.2022(VII-I).37
▪ L- ISSN: 2520-0348 ▪ p- ISSN: 2520-0348 ▪ e-ISSN: 2616-793X
▪ Citation: Maqbool, R., & Ch. A. H. (2022). Impact of Cooperative Integrated Reading and Composition Method on Development of English Reading and Writing Skills of Secondary School Students. *Global Social Sciences Review*, *VII*(I), 401-416. https://doi.org/10.31703/gssr.2022(VII-I).37

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Impact of Cooperative Integrated Reading and Composition Method on Development of English Reading and Writing Skills of Secondary School Students

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Abstract: *The Cooperative Integrated Reading and Composition (CIRC) English teaching approach was compared to the traditional English teaching method in this study. The research was carried out in Punjab secondary schools. The goal of this research was to see how the CIRC technique compared to traditional English teaching methods. Because teaching pedagogies primarily rely on teacher-centred methods, the absence of critical pedagogies during the teaching process results in an unproductive system. The kids' creativity and mental strength were boosted as a result of this technique, and they were better able to employ it in social and academic settings. In nature, the current study used a pre-test-post-test nonequivalent control group design. The study included experimental and control groups. The study's participants were chosen using a convenient sampling approach. The experimental group was given the treatment (the CIRC technique was used), whereas the control group was given traditional instruction. A pilot study was conducted to establish the test's content validity and item analysis. To test the hypotheses, descriptive (Mean, percentage) and inferential (independent and paired samples t-tests) statistics were used to evaluate the data. The study's findings were useful for instructors in establishing new teaching techniques to address the challenges in developing English reading and writing abilities, as well as the obstacles experienced by secondary school students in learning English.*

Key Words: Cooperative Integrated Reading, English Reading and Writing Skills, Education

Introduction

In recent times, up-to-the-minute demands are deposited by the virtual community to the people for meeting their skills in literacy and English Acikgoz, K. U. (1992). The reading of the second language (L2) in Pakistan has not been so successful in spite of the teaching in this particular field. English is an international language; therefore, people should have a high level of English

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proficiency in order to excel in the academic world Ahmed, S., & Rao, C. (2012). The English language builds up nations, and it also plays an important role in communicating with the international community. Consequently, there is a growing demand for the English language, which requires the citizens to be proficient enough for success in their academic/professional careers (Alhaidari, M. S. 2006; Almubark, A. A. 2016). According to Shouket and Ghani (2015), globally, high-level skills in literacy are a mandatory requirement in all education institutions Bhatti, T. M. (2013). In order to make a better and prosperous life, individuals are required to be literate to achieve high-standard academic goals (Richards & Rodgers, 2001) Bryson, F. K. (2003). Silent reading of English has been recommended as a basic and essential part of reading lessons. However, these practices are not followed in the secondary institutions of Pakistan (Bryson, 2003; Chan, K.Y. 2004). The best way to learn the language is by reading, writing and speaking. Different ways of effective teaching can also help the students understand the sentence structures, vocabulary and writing styles. The primary goals of language learning are to employ collaborative tasks such as classroom participation, group work, and role plays, among others, to address the complex idea of classroom interactional activities (Creswell, J. W. 2009; Dar, M. F., & Khan, I. 2015). Cooperative Learning (CL) was identified by Acikgoz et al. (1993) as an effective teaching strategy that may be used in the classroom for elementary and secondary school pupils Ebel, R. L., & Frisbie, D. A. (1991). Cooperative learning is centred on participation, accountability, group activities, and social skills in small groups. In this way, students also get a chance to share knowledge, ideas, and information which results in a positive interaction with other students (Fitria et al., 2015). Steven and Slavin proposed a Cooperative Integrated Reading Composition (CIRC) learning strategy in the last part of the 1980s. It has been observed that this method has a profound impact on the learning and writing skills of students as well as improved standardisation. Madden et al. (2004) focused implementation method of CIRC, including teacher's introduction in the classroom, assessment, group work, and detection of successful groups (Johnson, D. W., & Johnson, R. T. 1989; Kapka, D., & Oberman, D. A. 2001). The core elements of CIRC Khan, H. I. (2011) are direct teaching in reading comprehension, story-related activities, and integrated language arts/writing education. The student-centred teaching approach demands renewed curricula that involve active students' participation in the learning process. Training issues must be adopted inside the teaching method to ensure effective self-expression via students and top comprehension for the duration of studying/ writing activities. Teachers have to additionally pick suitable coaching methods for precise environments of learning (Kapka & Oberman, 2001; Khan, S. A., & Ahmad, R. N. 2014).

Literature Review

Language education requires collaboration among researchers, teachers and subject specialists for a variety of reasons. Khan and Ahmed et al. (2014) describe that in Pakistan, the teachers deliver lectures in such a way that the student's priority is to memorise that lecture instead of learning its deep concepts Lee, W. H., & Tan, S. K. (2004).

According to Khan (2011), English is taught in Pakistani institutions as a compulsory subject in secondary schools. Moreover, the courses in science, social science and arts are also designed in English. The main purpose behind such an idea is that the students of Pakistan could withstand an international community in understanding and teaching the subjects Madden, N. (2004). Cutler and Garaham (2008) state writing skills in English are also very important. However, in order to develop these skills, one should have some complete command of the English vocabulary Moreau, A. (2015).

Dar and Khan et al. (2015) said, however, in Pakistan, English is taken as the secondary language. Therefore, the students of post-secondary classes do not get a hold of this language. There might be several reasons for such a poor academic set-up in secondary schools, lack of learned and skilled teachers, improved way of teaching and

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financial constraints Mubarok, H., & Sofiana, N. (2017).

Shauket and Ghani et al. (2015) stated that there is the need of the hour to improve the teaching skills in both private and public sector institutions through the training of their teachers. This can enable them to deliver lectures in a more professional and advanced form, resulting in the development of students' learning and understanding. Teachers should make strict disciplines towards both studies and class activities Nejabati, N. (2015).

Wigfield et al. (2004) emphasised improving the capability of academically weak students. One should stress the cooperative learning method Richards, J. C., & Rodgers, T. (2001). In 2003, vocabulary learning in a Vietnam university was established by Lee Cutler, L., & Graham, S. (2008). It was suggested that cooperative learning is an effective way to improve vocabulary (Liu, 2008; Rininta, T., & Oleh, C., 2011). Moreover, the vocabulary can also be improved through group discussions. According to Slavin (2000), it is required for the students to participate in a variety of actions for interacting, sharing, problem-solving and open-ended products. In the concept of the traditional interface, these strategies vary as their centre of attention is on learning outcomes being opposite to the fruitful tasks Slavin, Robert E., and Nancy A. Sabarun (2011) described as cooperative learning for students in the creation of an effective classroom climate to attain universal intentions by offering an essential function in students' emotional and linguistic growth is practical and applicable Sabarun, S. (2011).

The conceptual framework of this research (as shown in Fig. 1) demonstrated that reading and writing skills of English subjects taught to secondary school students could be encouraged by implementing CIRC because learning collaboratively encourages because it increases classroom interaction. The learners can be engaged by descriptions, demonstrations and opportunities for learning via CIRC.

Research Hypotheses

Ho1: There is no difference in pre-test scores of conventional teaching in English reading and writing skills of pre-9th class students.

Ho2: There is no statistical difference in post-test scores of CIRC and conventional teaching in English reading and writing skills of pre-9th class students.

Ho3: There is no significant difference in pre and post-test scores of CIRC teaching in English reading and writing skills of pre-9th class students.

Ho4: There is no statistically significant difference in pre-and post-test scores of conventional teaching in English studying and writing skills of pre-9th class students.

Ho5: There is no significant difference in pre-test scores of conventional teaching in English reading and writing skills of pre-9th class students.

Ho6: There is no significant difference in post-test scores of CIRC and traditional teaching in English coordinating and subordinating skills of pre-9th class students.

The Objective of the Study

The following research objectives will be met:

1. Determine the influence of Cooperative Integrated Reading and Composition (CIRC) on the development of secondary school students' English reading and writing skills.
2. Compare the efficacy of Cooperative Integrated Reading and Composition (CIRC) versus traditional instruction in developing secondary school students' English reading and writing abilities.

Methodology

In this study, the influence of the CIRC method on the development of English writing and reading skills of pre-9th class students was investigated.

Research Design

This research design was quasi-experimental that was mainly quantitative. The cause and effect were investigated in this experimental study through hypotheses, and the experimental and control groups were selected as intact groups, i.e., existing classrooms. The experimental design of the study is presented in table 3.1. A convenient sampling technique was used in this study.

Internal Validity Threats

The pre-test was taken from both sections of pre-9th class students to avoid selection bias. The threat of academic loss was minimised in a way that the researcher herself had to teach these students for the whole academic session ahead. The pupils in both the experimental and control groups were about the same age. To prevent the potential factor, the researcher taught the experimental group while another teacher taught the control group.

Participants of the Study

All the students of pre-9th belong to Govt. Girls High School 371 JB, Toba Tek Singh, were taken as participants of the study having the following parallel characteristics;

1. Female students enrolled and studying at Govt. Girls High School 371 JB, Toba Tek Singh.
2. Ages range from 13-16 years.
3. Class sizes ranging from 20-35 students

In order to eliminate the effect of the intervening variable of gender, only girls' schools were selected.

Sample of the Study

The sample of the study consisted of pre-9th class students studying English subject at Govt. Girls High School 371JB, Toba Tek Singh. Two different sections of the pre-9th class were considered intact groups. The students of pre-9th classes were selected in order to conduct the experiment so that time of their actual academic session may not be lost. One section was considered an experimental and the second was a control group. The two sections were selected. One section consisted of students having Bio-Science or Computer-Science subjects which were considered as a control group. The participants in the other section were the students of the general group or studying Arts discipline were called the experimental group.

Instrumentation

The learning achievement exam was administered to both the experimental and control groups. During the 11 weeks, students were taught comparable topics in order to get pre-test and post-test results. The pre-test was conducted for these two groups before teaching the particular subject, and then a similar test was used to obtain post-tests scores for the achievement of study objectives.

Test

The test consisted of two sections i.e.

i. Section I: Reading passages
ii. Section II: Writing short stories, summaries and sentence making

Section I: Reading Passages

Students had to read the passages collected from different textbooks of grades 6 to 10 and answer the related questions by selecting appropriate options (MCQs). The MCQs were comprised of the correct spellings, meanings of some vocabulary words, recognition of synonyms, nouns and their types, adjectives along with their degrees, adverbs as well as their kinds, putting of articles and conjunctions, identification of similes, gerund, participles, prefixes and suffixes and appropriate use of prepositions. Twenty minutes were assigned to attempt these MCQ items. Each item carries equal marks, i.e. one mark for an accurate answer and zero scores for a false answer. No negative marking was there in any of the given questions.

Sections II: Writing

In this part, their different topics were given to the students for writing short stories, summaries, dialogues, and short essays.

Validity and Reliability

The content validity of the pre-test and post-test were supposed to be assessed by 5 experts in the field of pedagogy, and English content and two peer scholars validated the instrument in the light of the research objectives. The validity of the test was also piloted by 69 students who could not participate in the intervention.

Procedure of Intervention

Two intact groups were selected in this study, from which one of the experimental groups was treated as a CIRC group, and another group was treated as a control group having the traditional set-up of the classroom. These experimental and control groups were assigned classes through non-random assignments. This was continued throughout the eleven weeks starting from 18th January 2021 to 6th April 2021. The intervention lasted roughly 12 weeks over the course of three months. The researcher herself was assigned to teach two groups since she had 12 teaching times each week and daily two 45-minute lessons. For the purpose of analysing the impact of CIRC, researchers taught content from several English textbooks for children in grades pre-K through 9. Both groups had the same course content and learning materials. The lectures for the experimental group were structured so that everyone could participate in the investigation. Every student had her own portfolio in which she documented her achievements. The students were given comments. Both groups were evaluated after the therapy had been applied. The experimental group was instructed to use the CIRC method. After using the CIRC technique to determine the substantial influence of those activities on the development of students' English reading and writing skills, the experimental group was examined. Tests were based on English reading and writing abilities and were drawn from chapters developed by the researcher in collaboration with other subject teachers at the school. The pre-test and post-test scores were also compared to determine the efficiency of the CIRC teaching method. Students were requested to discuss various learning resources related to their course's subjects. The goal of this endeavour was to refresh their knowledge and learning abilities. It also gave students the chance to try out fresh ideas and methods for learning English reading and writing.

Students were told to feel free of any threat of losing marks or harm from wasting time or doing insults. The researcher maintained a portfolio of all the groups in which evaluation of their chapter-wise progress was recorded. The students themselves selected their work mode in fulfilling their tasks on different topics. Students in the experimental group were exposed to the CIRC method, which was suitable for English reading and writing skills. By use of ICT, students explored various CIRC methods globally. Students also offered comments to their classmates regarding their work and the teacher's scorekeeping.

Teacher-Centred Classroom: Control Group

A traditional set-up was already there at the school in the control group of the class to be taught by other English teachers. Students learnt through rote memorisation. Students were not allowed to move outside during the class lecture. The teacher did not give any feedback on the performances of the students. Random nomination of students was made for the presentation of their names and contents during the lecture.

Delimitations

Students from Govt. Girls High School 371 JB, Toba Tek Singh, were the only ones who took part in the study. In the future, researchers should try to recruit a bigger sample size throughout the course of an academic year. The experiment might possibly be replicated as part of a multi-year longitudinal study. Another constraint was the lack of time for action because of the anticipated school closures induced by the pandemic COVID-19.

Data Analysis

The data was analysed using inferential statistics. To establish the significant difference between groups and pre-test and post-test before and after the treatment of the groups, the Repeated Measures ANOVA, independent samples t-test, and paired samples t-tests were employed.

Results

H_{01}: For analysing the above hypotheses (H01), a repeated measure ANOVA was applied. It relies on the sphericity assumption, which assesses that the population difference scores variance for two conditions should be the same. Table 6 shows Mauchly's Test of Sphericity of Cooperative Integrated Reading Composition (CIRC). The assumption of sphericity has been violated because the value of 0.01 is less than the 0.05 level of significance. As a result, there is a substantial difference between the variances. If the data does not meet the sphericity assumption, the degrees of freedom for effect can be changed. The Greenhouse-Geisser estimate (ε) has a value between 1/k-1 and 1. (Here, k represents the number of repeated measures conditions). The value of 1/k-1 in this data is 0.20, which is less than 0.75.

The results of table 7 show that the value of CIRC on the English writing and reading skills of students, F (638.659), p= .000 < .05 at p = 0.000 significance level, so in the proposed hypotheses H_{01}: "There is no significant effect of CIRC learning on Secondary School Students' English Writing and Reading Skills" is rejected and it is concluded that the CIRC imposes a prominent effect on English reading and writing skills of secondary school students.

In addition, the partial Eta Squared value (.968) also validated the substantial impact of Cooperative Integrated Reading Composition (CIRC) on Mc values during six interventions for this work that strongly recommends a very large effect size. The graph of CIRC versus Estimated Marginal Means of Measure is shown in Figure 2.

H_{02}: The sphericity assumption is used to test whether the variance in population difference scores for any two conditions is similar to the variance in population difference scores for any other two conditions. This assumption is investigated using Mauchly's sphericity test shown in Table 8. The 0.003 significant value is lesser than that of the critical value of 0.05, which means prominent differences between variances of differences exist. In this case, if obtained data violates the sphericity assumption, then the degrees of freedom for effect are adjusted. The value of the Greenhouse-Geisser estimate (ε) changes between 1 and 1/k (where k is the number of repeated measures conditions).

The results of Table 9 show that the value of CIRC on English reading and writing skills of secondary school students of the experimental group, F (4536.476), p= .000 < .05 at p = 0.000 significance level, so the hypothesis H02: "There is no significant effect of CIRC on the Secondary School Students' English Writing and Reading Skills" is rejected and it is concluded that the CIRC have a significant effect on secondary school students English writing and reading skills.

Furthermore, partial Eta Squared value (.993) also supported the significant effect of Cooperative Integrated Reading Composition (CIRC) on Mc values during six interventions in this work that recommends a large size effect shown in Figure 3.

H_{03}: The results obtained are mentioned in Table 10. It is clear from the table that there is a significant difference (M=14.79, SD=4.57) at a p≤0.05 significance level with (t=6.999, p=0.000) of the control group. So.H_{03} was rejected.

H_{04}: The null hypothesis "There is no significant difference between pre-test and post-test scores CIRC learning effect on Secondary School Students' English Writing and Reading Skills of Experimental Group" is rejected. The results showed a significant difference (M=19.87, SD=6.76) at a p≤0.05 significance level with (t=-3.733, p=0.001) of the experimental group. The results obtained are given in Table 11.

H_{05}: A T-test was used to investigate the difference between the experimental and control groups regarding the CIRC learning effect on English Writing and Reading Skills of Secondary School Students. The results obtained are given in Table 12. The table shows a significant difference between the

control group (M=14.79, SD=4.57) and the experimental group at a p.05 significance level with (t=-3.259, p=0.002) of pre-test value. So, the H_{05} was rejected.

H_{06}: The results obtained are given in Table 13. The results show a prominent difference between the control group (M=20.61, SD=5.18) and the experimental group (M=55.38, SD=53.07) at a p≤0.05 significance level with (t=-3.624, p=0.001). The null hypothesis "There is no significant difference exists between the post-test of experimental and control groups regarding CIRC effects on the English Writing, and Reading Skills of Secondary School Students" is rejected.

Findings

This research shows that the teaching method has a great impact on the English writing and reading skills of students. Different teaching methods, including the CIRC teaching method and regular method, improved the learning process of both groups. The outcomes of the experimental group students were that they displayed higher scores than the students of the control group.

Discussions

In this work, the CIRC technique and traditional teaching method impact was studied on writing and reading skills of the secondary school student. It was suggested that the CIRC teaching method is an alternative approach for enhancing the skills of students in English language learning. The mean scores of the control group were = 14.79 and 20.61 in the pre-test and post-test, respectively. Both experimental and control group students who participated in an experiment to enhance their test results saw a rise in their mean scores. Analysis of the obtained data revealed a statistically significant difference in terms of a common effect between the control group and experimental group (M=20.61, SD=5.18) at p=0.001.

Conclusions

Students' needs to strengthen their English reading and writing skills at school are addressed by the CIRC activities. These can aid in the provision of more texts that correlate to exam patterns, grammar and vocabulary exercises, and text structure. Weblog resources, on the other hand, should be favoured for the learning process. As a result, the material was improved by including games, providing direct feedback, reducing questions, simplifying instructions, and providing demonstrations prior to the assignments being completed. Because the students' involvement and motivation abilities have improved as a result of these products, the learning process has become more effective. This aided them in improving their English language reading and writing skills.

Recommendations

- CIRC classrooms at the secondary level may increase learning in pairs or groups. So, teachers should have a better understanding of cooperative learning techniques so that by using CIRC, they can know how to implement the technique more effectively to improve the secondary school students' learning in English reading and writing.
- CIRC may enhance the secondary school students' interest level in English classrooms, so efforts are made by the English teacher to eliminate their classroom boredom by applying the elements of cooperative learning. It aids the students to keep their interest in the subject of English reading and writing in the long run of their lives.
- Effective implementation of CIRC includes good teaching to the students and developing their skills in how they provide feedback, ask questions and think critically in the group form.
- Development in English reading and writing skills will ultimately contribute to the improvement of the annual results of secondary school students.

Implications

The research found that combining pair and group work can help children in elementary school cooperate more effectively. The findings of this study might have a significant influence not only on instructors and students but also on course designers of English at the secondary school level in order to increase students' learning skills.

Future Call

1. More research should be conducted regarding other skills of English language learning in Pakistan.
2. It is suggested to research the CIRC methods from the perspectives of teaching as well as learning.
3. The cooperative learning method, i.e. CIRC, should be experimented with for a whole academic session with sufficient time to see its impact thoroughly.
4. The future researcher may conduct a study comparing the effectiveness of CIRC among students of two or more two schools to observe its larger generalisation.

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Appendix

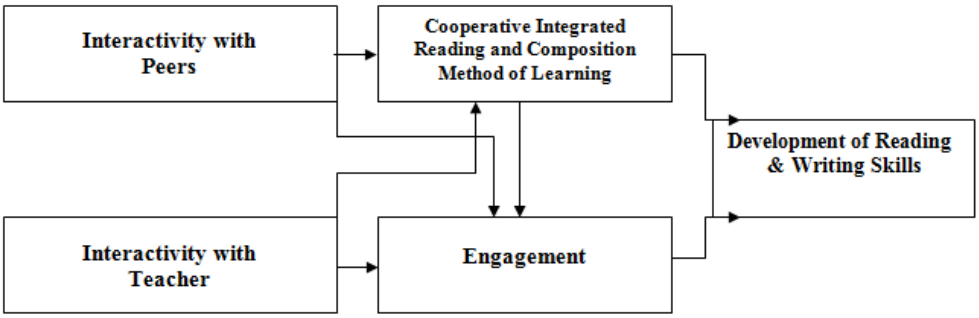

Figure 1: Conceptual Framework

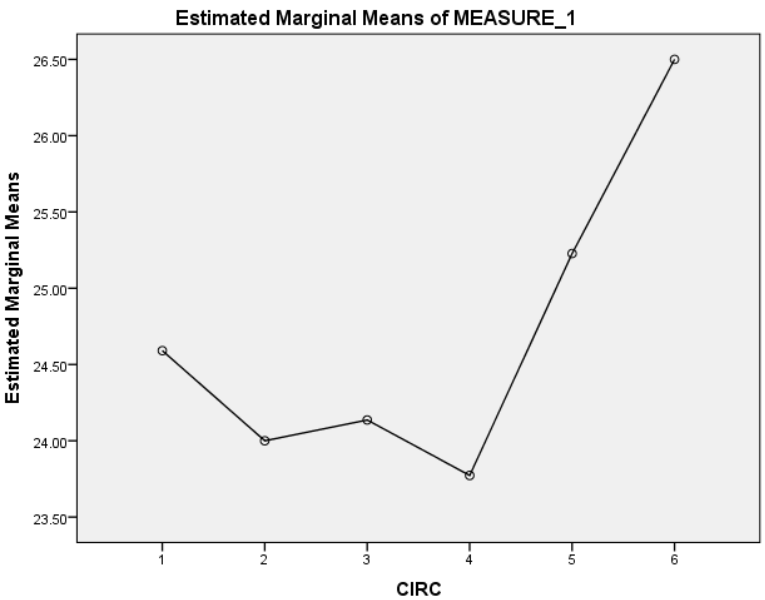

Figure 2: Estimated Marginal Means of Measure

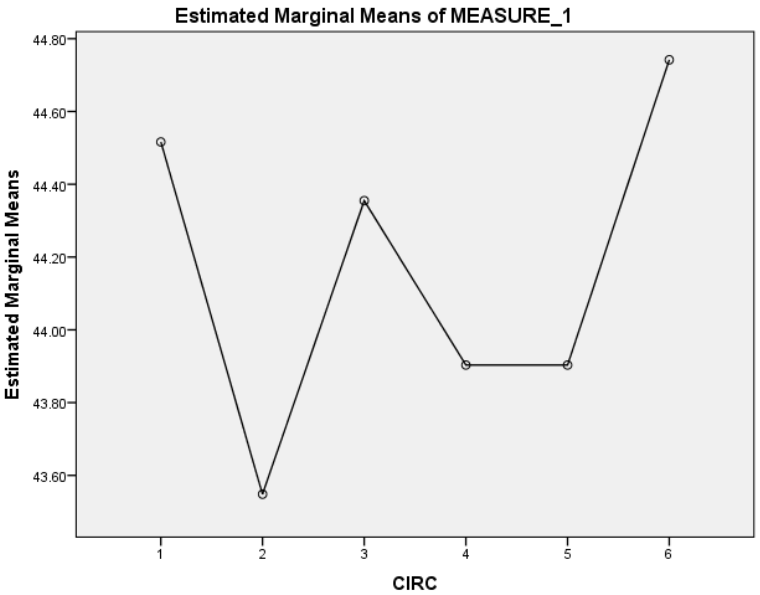

Figure 3: Estimated Marginal Means of Measure

Table 1. Experimental Design

Treatment Group	O	X	O
Control Group	O	C	O

Source: *Creswell (2009)*

Table 2. Details of questions and marks allocation

Question Number	Marks	Attempting Status
Q 1 MCQs	19 (1 mark for each)	Compulsory
Q 2 Short answers	5 (2 marks for each)	Compulsory
Q 3Translation	2 (4 marks for each)	Choice in a, b or c part
Q 4 Summary	1 (5 marks)	Compulsory
Q 5 Sentence making	5 (5 marks)	Compulsory
Q 6 Letter/Story/Dialogue	1 (8 marks)	Choice in a, b or c part
Q 7 Comprehension passage	1 (8 marks)	Compulsory
Q 8 Change the voice	1 (5 marks)	Compulsory
Q 9 Translation in to Urdu	1 (5 marks)	Compulsory

Table 3. Table of Specification

Content	Weight age	Knowledge 37%						Comprehension 28%				Application 35%		No.of Items	Total Marks
		Questions Answers	Words Meanings	Correct Spellings	Summary	Story	Translation	Comprehension	Sentences	Objective Items	Translation	Change the Voice	Objective Items	Questions Answers	Words Meanings
The Saviour of Mankind	16%	1(2)	1(1)	1(1)	–	–	1(8)	–	1(1)		–	5	13	16%	1(2)
Patriotism	13%	1(2)	1(1)	1(1)	–	–	–	–	1(1)		–	4	5	13%	1(2)
Hazrat Asma (R. A)	26%	1(2)	1(1)	1(1)	–	–	–	–	1(1)		–	4	5	26%	1(2)
Daffodils	17%	–	–	–	1(5)	–	–	–	–		–	1	5	17%	–
The Quaid' s vision and Pakistan	16%	1(2)	1(1)	1(1)	–	–	–	–	1(1)		–	4	5	16%	1(2)

Content	Weight age	Knowledge 37%						Comprehension 28%				Application 35%			No.of Items	Total Marks
		Questions Answers	Words Meanings	Correct Spellings	Summary	Story	Translation	Comprehension	Sentences	Objective Items	Translation	Change the Voice	Objective Items	Questions Answers	Words Meanings	
The Sultan Ahmed Masjid	12%	1(2)	1(1)	-		-	-	-	1(1)		-	3	4	12%		1(2)
Grammar	-	-	1(8)	-	1(10)	-	5(5)	5(5)	5(5)	5(5)	22	38	-	-		1(8)
Total	100 %	5(10)	5(5)	4(4)	1(5)	1(8)	1(8)	1(10)	10(10)	5(5)	15 (15)	43	75	100 %		5(10)

Table 4. Ranges of Item Difficulty

Percentage Range	Difficulty Index	Interpretation
75%-100%	0.75 – 1.0	Easy
26%-74%	0.25 – 0.75	Average
0-25%	0.25 or below	Difficult

Source: *Ebel and Frisbie (1991)*

Table 5. Item Difficulty of the Scores

Sr. No.	Items	Item Difficulty
1.	Item 1	.85
2.	Item 2	.60
3.	Item 3	.70
4.	Item 4	.65
5.	Item 5	.65
6.	Item 6	.55
7.	Item 7	.50
8.	Item 8	.45

Sr. No.	Items	Item Difficulty
9.	Item 9	.40
10.	Item 10	.30
11.	Item 11	.55
12.	Item 12	.55
13.	Item 13	.70
14.	Item 14	.35
15.	Item 15	.40
16.	Item 16	.55
17.	Item 17	.50
18.	Item 18	.35
19.	Item 19	.30

Table 6. Mauchly's Test of Sphericity on Cooperative Integrated Reading Composition (CIRC) Method

Within Subject Effect	Mauchly's W	Approx. Chi-Square	*df*	*Sig.*	Greenhouse-Geisser (Epsilon[b])
CIRC	0.22	28.59	14	0.01	0.72

Table 7. The Impact of CIRC of Control Group across Six Steps of Intervention

Measures	Control Group		
	N	Mean	SD
Chapter 1	22	24.59	4.98
Chapter 2	22	24.00	4.89
Chapter 4	22	24.13	5.24
Chapter 5	22	23.77	5.00
Chapter 6	22	25.22	4.64
Chapter 7	22	26.50	4.59
F		638.659	
Df		21	
Sig.		.000	
Partial Eta squared		.968	

Table 8. Mauchly's Test of Sphericity on Cooperative Integrated Reading Composition (CIRC) Method

Within Subject Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Greenhouse-Geisser (Epsilon[b])
MAI	.308	33.10	14	.003	.690

Table 9. The Impact of CIRC of Experimental Group across Six Steps of Intervention

Measures	Experimental Group		
	N	Mean	S.D.
Chapter 1	31	44.51	4.69

Measures		Experimental Group	
Chapter 2	31	43.54	5.02
Chapter 4	31	44.35	4.92
Chapter 5	31	43.90	4.88
Chapter 6	31	43.90	6.25
Chapter 7	31	44.74	4.41
F		4536.476	
Df		30	
Sig.		.000	
Partial Eta squared		.993	

Table 10. Pre-test and Post-test comaprasion regarding CIRC impact on English Writing and Reading Skills of Secondary School Students (Control Group) (N=22)

Measures	Scores	*N*	*M*	*SD*	*t- value*	*df*	*Sig.*
Control Group	Pre-Test	22	14.79	4.57	-6.999	21	.000
	Post-Test	22	20.61	5.18			

Table 11. Pre and Post tests' impact of CIRC learning on English Reading and Writing Skills of Secondary School Students' of Experimental Group (N=31)

Measures	Scores	*N*	*M*	*SD*	*t- value*	*df*	*Sig.*
Experimental Group	Pre-Test	31	19.87	6.76	-3.733	30	.001
	Post-Test	31	55.38	53.07			

Table 12. Pre-tests' impact of CIRC learning on English Reading and Writing Skills of Secondary School Students' of Experimental and Control Groups

Measures	Groups	*N*	*M*	*SD*	*t- value*	*df*	*Sig.*
Pre-Test	Control Group	22	14.79	4.57	-3.259	50.917	.002
	Experimental Group	31	19.87	6.76			

Table 13. Post-tests comparison regarding CIRC on the English Writing and Reading Skills between Control and Experimental Groups of Secondary School Students

Measures	Groups	*N*	*M*	*SD*	*t- value*	*df*	*Sig.*
Post-Test	Control Group	22	20.61	5.18	-3.624	30.804	.001
	Experimental Group	31	55.38	53.07			