SUMMARY

The investigator in this study tried to ascertain the improvement in paragraph writing skill of secondary school students in English using self-regulated strategy model. This final and concluding chapter summarizes the present study in brief.

In this chapter the rationale of the study, statement of the problem, operational definitions of the key terms, objectives of the study, framed hypothesis, method used, research design, variables of the study, tools used, statistical techniques used, findings of the study, educational implications and suggestions for further study are given.

THE PRESENT STUDY IN RETROSPECT

To begin with, the focus of the research was to compare the effectiveness of two instructional methods-adapted self-regulated strategy model and conventional method. The comparison was done on the improvement of the paragraph writing skill of IX class students of a public school. The study was based on the following rationale:

Rationale of the study

In the syllabus for secondary and higher secondary levels recommended in National Curriculum Framework (2005), one of the prime objectives of teaching English at secondary level is to make learners proficient in writing skill. It is mentioned that

“Writing is not a mechanical skill; it involves a rich control on grammar, vocabulary, content, punctuation as well as abilities to organise thoughts coherently often using a variety of cohesive devices such as linkers and lexical repetitions through synonymy, etc. A learner should develop the confidence to express her thoughts effortlessly and in an organised manner. The student must be encouraged and trained to choose her own topic, organise her ideas and write with a sense of audience. This is possible only if her writings are seen as a process and not as a product. She should be able to use writing for a variety of purposes and in a variety of situations ranging from informal to very formal.”

159
These recommendations given in National Curriculum Framework (2005) have not been achieved so far in Indian schools because teaching writing skill in India is considered as a product and not a process. It is limited to imparting the knowledge of grammar, vocabulary, punctuation, spellings etc. If secondary class students of public schools in India are considered good in using grammar, spellings, vocabulary etc., then also these students are not able enough to use this knowledge to plan, organize, control, manage and evaluate their paragraph writing process. Therefore, efforts from the teachers are required to teach the students about the use of self-regulated strategies using an instructional model which enables them to plan, organize, control, manage and evaluate their paragraph writing process. Students in India need an instructional model which presents strategies in steps to guide them and lead them to become independent in paragraph writing skill.

**Statement of the problem**

Effect of Self Regulated Strategy model in improving the writing skill in English language of secondary school students.

**Operational definitions of the key terms used**

**Effect:**

According to The Concise Oxford Dictionary, Effect means a change that results when something is done or happens. In this study, “effect” means the change in the writing performance of the students by using Self Regulated Strategy model.

**Self-regulated strategy model:**

The Self Regulated Strategy model in the present study is based on Self Regulated Strategy Development Model developed by Steve Graham, Harris, MacArthur, & Schwartz (1991). It is a comprehensive and flexible model that explicitly helps students to learn and manage the writing process. The Self Regulated Strategy model used in present study is adapted keeping in view the Indian students in Indian situations where English is taught as second language. This model is used to apply the strategy while writing paragraphs.

**Writing Skill:**

According to Pahuja (2012), Writing skill is the fourth linguistic skill which is used for the expression of relevant & organized ideas in written mode in the form
of paragraph, story, and letter. In the present study, writing skill is concerned with the development of ability to collect, plan, and organize ideas in the form of paragraph by using correct vocabulary, correct spelling, and correct grammar among secondary school students.

**English Language**

According to The Concise Oxford Dictionary, English language is the language of people of England. But Pahuja (2012) is of the view that English language has now become international language which is taught and learnt in many countries including India. In the present study, English language was also treated as second language which is taught in India as a compulsory subject in all schools from elementary level till senior secondary education level, in which most of the students are not proficient.

**Secondary School Students**

NCERT (2005) conducted Seventh All India School Education Survey and mentioned that IX–X classes of Indian school system constitute secondary stage of school education. As per Tenth Five Year Plan (2002-2007), secondary education prepares young persons between the age group of 14-18 for entry into higher education. In this study, secondary school students are in the age group 14-16 years and are studying in IX class in public schools.

**Objectives of the study**

1. To develop and validate a test for identifying the paragraph writing skill in English language for secondary school students.

2. To develop and validate the instructional material for adapted SRS model for teaching paragraph writing skill by self regulated strategy model.

3. To develop and validate the instructional material for teaching paragraph writing skill by conventional method.

4. To develop and validate criterion referenced test for both self-regulated strategy model and conventional method to measure the mastery of paragraph writing skill.

5. To develop and validate retention test for both self-regulated strategy model
and conventional method to measure the retention of paragraph writing skill.

6. To compare the effect of self-regulated strategy model and conventional method on paragraph writing skill of secondary school students at pre-test stage.

7. To compare the effect of self-regulated strategy model and conventional method on the paragraph writing skill of secondary school students at post-test stage.

8. To compare the effect of self-regulated strategy model and conventional method on the retention of paragraph writing skill of secondary school students.

Hypothesis of the study

1. There exists no significant difference between self-regulated strategy model and conventional method on paragraph writing skill of secondary school students at pre-test stage.

2. There exists no significant difference between self-regulated strategy model and conventional method on paragraph writing skill of secondary school students at post-test stage.

3. There exists no significant difference between self-regulated strategy model and conventional method on the retention of paragraph writing skill of secondary school students.

Method of the study

The investigator used pre-test-post-test control group experimental method in non-laboratory settings.

Research design

In this study, investigator used dual group pre-post test experimental design. The experiment began with the random selection of English medium public school in Ambala district, Haryana. Eighty five students of IX class (boys+ girls) were also selected randomly from that school for the study. These students were given English Language Assessment test for assessing their knowledge of grammar, vocabulary, spelling, punctuation, sentence formation and composition skills. This test was
developed and validated by the researcher to know their knowledge of English language. Those who achieved the criteria of forty percent in this test were selected for administering the Raven’s Standard Progressive Matrices test of intelligence on them. Because of irregularity and non-seriousness of the five students, eighty students were finally retained out of eighty-five students. On the basis of their IQ scores, two groups comprising of mixed intelligence and English language level students of equal size were formed. It means two groups of forty students each were formed with each group consisting of students of high, middle and low intelligence levels. One group was termed as Experimental and other was termed as Control group. Both groups were pre-tested using CRT for each paragraph before instruction. Afterwards, Experimental group was taught through self-regulated strategy model and control group was taught through conventional method for each paragraph. To measure their achievement in each paragraph writing, both groups were post-tested using the same CRT for each paragraph after the experiment. This procedure continued for four types of paragraphs containing three in each type and hence there were twelve paragraphs in all. To measure the retention of both groups in each paragraph writing, both groups were again tested after one week of the experiment using the retention test.

Variables of the study

Independent Variable:

Material, strategy and model for adapted self-regulated strategy model and the lesson plans developed for conventional method of teaching.

Dependent Variable:

Achievement in paragraph writing skill.

Intervening Variables:

Grade level, intelligence, previous knowledge about the language, teacher behaviour, and contamination effect.

EXPERIMENTAL CONTROLS

Following controls were exercised by researcher during the experiment:

1. **Treatment:** The teaching competence or the competence to give treatment may vary from person to person. Therefore, to control the inter-group variation, the
researcher herself conducted the experiment in both the groups.

2. **Attitude:** The attitude of the researcher was same for both the groups. It was motivating for both the groups.

3. **Measuring Device:** The measuring devices were based on behavioural objectives so that the devices could not be the source of bias.

4. **Conditions:** The experimental conditions were similar for both the groups.

5. **Punctuality:** To avoid further sample death which occurred in the initial stage of sampling, Students were instructed to be regular during the experiment.

**Tools used**

**Assessment Tools**

1. Raven’s standard progressive matrix for measuring the intelligence of secondary school students.

2. Three tools were developed and used by the investigator:
   - English language Assessment Test.
   - Criterion referenced tests.
   - Retention tests.

**Instructional Tools**

The instructional material for the present study was developed in two categories:

1. Instructional Material for Adapted Self-regulated Strategy Model along with Scaffolding Material

2. Lesson plans for conventional method

1. **Instructional Material for Adapted Self-regulated Strategy Model along with Scaffolding Material**

   The instructional material for adapted self-regulated strategy model along with scaffolding material was developed in the form of twelve paragraphs and scaffolding material. This instructional material was developed by following adapted self-regulated strategy model which is based on the six stages of Self Regulated Strategy Development Model. The adapted self-regulated strategy model
in this study also consists of six stages. These six stages are meshed with self-regulated strategy ‘RCOWER’ developed by the researcher. Each step of the strategy is related with each step of the adapted self-regulated strategy model. These six stages blended with ‘RCOWER’ are given below:

a) **Recall Background Knowledge:** In this stage, teacher helped the students in recalling their previous knowledge related to the paragraph topic.

b) **Collect Ideas after Discussion:** Teacher taught the students to collect the fresh and new ideas. This was done using ‘Answer 6 W’ strategy. Students were told about the uses of this strategy in paragraph writing skill. The usage and benefit of the scaffolding material (support material) named ‘Think Sheet for ‘Answer 6 W’ strategy’ for collecting ideas was also discussed with students. They were also guided when to use this think sheet.

c) **Model the Organization of Ideas:** With the help of background knowledge and new collected ideas, the teacher modelled the organization of relevant ideas to students. The usage of scaffolding material for organizing ideas named ‘Format for Paragraph Writing Sheet’ was also demonstrated to students for developing paragraph writing.

d) **Write after Memorization:** In this step, students were instructed to memorize the strategy and usage of scaffolding material to collect and organize ideas. Then they were told to write the paragraph after organizing the collected ideas.

e) **Edit Paragraph with Support:** Students were told to edit the written paragraph with the teacher’s support and by using scaffolding material named ‘Chart for Editing and Revising the Paragraph’.

f) **Rewriting Independently:** In this step, students were motivated to rewrite the final draft of the paragraph independently. For this they were provided another scaffolding material named ‘Final Draft Sheet’.

**Scaffolding Material**

Scaffolding means providing support or help to the students during the learning process. Scaffolding material for the present study was developed in the following forms:
(i) Think Sheet for ‘Answer 6 W’ Strategy

(ii) Format for Paragraph Writing Sheet

(iii) Chart for Editing and Revising the Paragraph

(iv) Final Draft Sheet

This material was developed for all twelve paragraphs in English composition of IX class to execute adapted self-regulated strategy model including self-regulated strategy ‘RCOWER’.

(B) Lesson Plans for Conventional Method

The students of control group (G2) were taught using lesson plans. This was done to avoid any discrimination in providing the instruction to both groups. These lesson plans were also prepared on three paragraphs each on different topics of four types of paragraphs i.e. in total twelve paragraphs of English composition of IX class. Herbart’s approach and RCEM approach was followed for planning lessons for conventional teaching. The steps for developing the lesson plans were:

a) Identification Detail

The identification data of the students was mentioned in this step. It helped in identifying the target group for planning lesson. It consisted of entries like subject, class, section, period, duration etc.

b) Specific Objectives

The specific objectives were formulated to carry out the teaching activities accordingly. These were determined to clear the objectives of the lesson. These were concerned with the lesson to be taught.

c) Teaching Aids

Teaching aids were the teaching aids used in classroom teaching-learning. These aids included the always available common classroom equipments and objects. Apart from these general aids which were already present in classroom, some specifically planned and prepared teaching aids were also used in teaching paragraph writing in classroom.
d) Previous Knowledge Assumed

For teaching paragraph writing skill on a particular topic, the previous knowledge, skills and experiences of the students were assumed. This acts as a base for planning the lesson to a great extent.

e) Previous Knowledge Testing

The previous knowledge of the students which was assumed in previous step was now tested. This testing was done using questioning skill. This step also helped in linking the previous knowledge of students with the content to be taught. It also prepared students for learning new topic.

f) Announcement of the Topic

In this step, the topic to be taught was announced in classroom when students were unable to give any response to the question in previous knowledge testing.

g) Presentation

Here the planning of the content was done for the purpose of its presentation. Presentation means the activities performed in class to achieve the prefixed objectives.

h) Home work

At the end, Homework was given to the students. It was given on the basis of learnt knowledge in class.

Statistical techniques used

(i) The measure of central tendency and the measures of dispersion such as mean and S.D were worked out to know the nature of the data; and

(ii) t-test was used to compare the effect of self-regulated strategy model and conventional method of teaching.

Findings of the study

I. Instructional material for SRS model was prepared for developing writing skill among IX class students. The material was evaluated by calculating error rate & gain ratio to find out the reliability and validity of developed instructional material.

(i) The error rate in all the twelve paragraphs was found to be in between 18% to
22.2% which is below 25%, which is acceptable in teaching English as a second language. This proves that most of the instructional material was understood by IX class students. It further indicates that the instructional material for SRS model was reliable enough to be used for experimentation.

(ii) The gain ratio for all paragraphs ranges from 0.59 to 0.68 which means that there was a gain of 59% to 68% through instructional material developed for SRS model which is acceptable in teaching second language. This proves the validity of instructional material which was to be used for experimentation.

II. The instructional material was also developed for conventional method in the form of lesson plans for developing writing skill among IX class students. Like instructional material for SRS model, lesson plans were also developed for all twelve paragraphs. These lesson plans were also evaluated using the same procedure as it was done for SRS model instructional material. The reliability and validity of lesson plans was calculated.

(i) Error rate for all twelve paragraphs ranges from 18.70% to 22.00% which is acceptable in teaching English as a second language. This shows that 78% to 81% of the items of CRTs were responded correctly after learning through the lesson plans in conventional method. This proves that developed lesson plans were comprehended by the IX class students. Therefore, on the basis of calculated error rate, it was concluded that lesson plans were reliable to be used for conventional method during experimentation.

(ii) The calculated gain ratio for all paragraphs ranges from 0.60 to 0.72 which means that there was a gain of 60% to 72% through lesson plans developed for conventional method. This range is acceptable in teaching English as a second language. It shows that the lesson plans were valid for experimentation on IX class students.

III. The measuring tools were developed in this study for two purposes. First purpose was to measure/identify the previous knowledge of IX class students in English language at sample selection stage, and second purpose was to measure the performance in paragraph writing skill after experiment. For previous knowledge measurement, English Language Assessment Test (ELAT) was
developed. For performance assessment, CRTs were developed for all twelve paragraphs for both methods of teaching—SRS model and conventional method. After development of these measuring tools, these were evaluated in terms of calculating their reliability and validity.

(i) The reliability of ELAT was computed using Test-retest method of finding reliability. The product moment coefficient of correlation was obtained from two sets of scores and the reliability coefficient was found 0.96. This shows that the test was reliable to be used at the initial stage of sampling process.

(ii) To determine the validity of ELAT, the technique of content validity was adopted. To ensure the content validity, all the items were selected only from the pool of relevant content areas. This item selection procedure ensured content validity. It was also determined by taking the opinion of subject experts. This helped in making ELAT a valid test for use.

(iii) Criterion referenced tests’ reliability was found for each CRT individually using test-retest method of estimating reliability. The value of Kappa ‘K’ for twelve CRTs was found. These values of ‘K’ were accepted as satisfactory. This proves that all CRTs were reliable for use in the study.

(iv) The validity of CRTs for twelve paragraphs was evaluated by ensuring content validity. The content validity of twelve criterion referenced tests was ascertained by the researcher herself. This task was done by comparing and matching the test items with the paragraph content and specified instructional objectives. By following this procedure, all the criterion referenced tests were found to be valid tools for measuring the achievement of students in paragraph writing skill.

IV. After experiment, the students’ retention on twelve paragraphs was measured using twelve retention tests which were developed on the same pattern of CRTs. The reliability and validity of all retention tests were also calculated to ensure its proper usage in the study.

(i) The test-retest method was used to calculate the reliability of retention tests. The ‘K’ values for all tests were found quite satisfactory. This
shows that retention tests were reliable for measuring the retention of IX class students after experiment.

(ii) The Validity of retention tests was also measured like CRTs. Content validity was ascertained for all twelve retention tests. It was done by comparing and matching the retention test items with the selected content area and formulated instructional objectives. All retention tests were also shown to subject matter expert for measuring the content and face validity. After this procedure, all retention tests were found valid for measuring students’ retention in paragraph writing skill.

V. The pre-test scores obtained by students of both groups-experimental & control- were found to be almost similar when computed together as well as individually paragraph wise for Pollution, Smoking, Global Warming, An Embarrassing Experience, Preparations for my Birthday Party, The Annual Prize Distribution Function, Making of Paper, Opening A Bank Account, Growing A Plant, The Coconut Tree, Red fort: Pride of India, and The Sunset.

VI. Students who were taught using SRS model performed better after experiment than those who were taught through conventional method when their total score for twelve paragraphs were computed. Experimental group also achieved more marks in all individual paragraphs as compared to control group at post-test level.

VII. The retention of students exposed to SRS model was found to be higher in the form of total retention scores for all paragraphs than the students who were exposed to conventional method. Their scores were also retained higher for individual paragraphs in comparison to control group students at the retention stage of experiment.

EDUCATIONAL IMPLICATIONS

In this study, the knowledge of English language required for paragraph writing was assessed by using English Language Assessment Test (ELAT). English language in India is learned as second language. Therefore, teachers should develop test which can help them in measuring students’ prior knowledge about English language. In this regard, it is the responsibility of the teacher educators to train pre-
service teachers to develop such tests which in turn will help them in testing their students’ knowledge of English language. Also in service teachers should be given training through workshops, seminars or refresher courses in developing measuring tools to assess existing knowledge of English language. The administrators must shoulder the responsibility of organizing these programmes for orienting the teachers. They should also enforce the need of measuring students’ prior knowledge in English language with the help of either developed English Language Assessment Test or alike tests. After knowing students’ knowledge in English language, they can further be taught paragraph writing skill by using instructional material for adapted self-regulated strategy model.

The present study aimed at developing paragraph writing skill among secondary school students. For this, instructional material was developed by using adapted self-regulated strategy model and evaluated by establishing reliability and validity. So, needful training should be provided to both pre-service and in-service teachers for developing instructional material. Furthermore, it suggests that adapted SRS model should be included as an essential component of teaching writing skill of English language at primary, middle, secondary, senior secondary and at higher levels of education. There is also a need to orient the language teachers for developing positive attitude towards the use of adapted self-regulated strategy model in their teaching.

As one of the finding indicates the effectiveness of adapted self-regulated strategy model over conventional method in developing paragraph writing skill, therefore, NCERT and SCERT should take step for preparing instructional material through adapted self-regulated strategy model either separately or integrate with other tasks of composition skills. This material can further be supplied to all schools either in digital or print form.

It was observed in this study that adapted self-regulated strategy model was effective in improving the paragraph writing skill of IX class students. This improved performance was measured and compared with students’ own performance by using criterion referenced tests both before and after providing treatment. So, teachers should be encouraged to develop and use criterion referenced tests as a tool to measure the students’ performance in paragraph writing by utilizing adapted self-regulated strategy model.
Another finding of the study is that the students exposed to adapted self-regulated strategy model retained higher scores in paragraph writing skill than those who were taught through conventional method. The reason for this may be that the steps of the strategy are simple, easy to memorize and recall. The use of scaffolding material helped them in practicing the strategy use and write paragraph in organized and systematic way. This type of instructional material helped students in writing paragraphs with more confidence and effectively even after one week of teaching paragraph writing skill. Thus, the administrators are suggested to arrange workshops to provide training to language teachers for using self-regulated strategy model in teaching English language. Also the curriculum planners should incorporate those components in the syllabi of teaching English language at different levels of education. With this, the administrators should also motivate the teachers to develop adapted self-regulated strategy model based instructional material and use it in classrooms.

**Suggestions for further research**

1. The present study was conducted on a sample of forty students in one group. This study may be extended in sample size by taking a larger sample.
2. This study included public school students. Another study may be conducted on students studying in other types of schools existing in India like government schools, govt. aided schools, aided-unaided schools.
3. Students of IX class were selected for this study. This dimension can be changed in other studies by taking students of other classes as sample.
4. The school selected for this study is located in urban area. An experimental study may be done on schools of rural area.
5. This study may be replicated with other writing strategies for other genres e.g. on story, essay, article, speech.
6. In the present study, the achievement of students was measured. Other studies may be conducted on measuring students’ confidence, self-esteem, attitude in conjunction with achievement.
7. In this study, the comparison was done between the performance of control and experimental group students. An experimental study may be done to compare the students within the group like below average, average and above average students comprising experimental and control group.


Akincilar, V. (2010). *The effects of "Please" strategy training through the self-regulated strategy development (srsp) model on fifth grade efl students' descriptive writing: strategy training on planning*. Masters Thesis. The Department of English Language Teaching, The Graduate School of Social Sciences, Middle East Technical University, Turkey.


Harris, K. R., Graham, S., Mason, L. (2002). POW plus TREE equals powerful opinion essays: Improving writing in the early grades. CASL News, 6, Department of Education, Vanderbilt University, US.


Department of Educational Technology, Bharathidasan University, Tiruchirappalli, Tamilanadu.


