Development of Metacognitive Strategic Programme for Secondary School Students

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Abstract - **English Language as a very important subject in schools especially in the Secondary level as it is the lingua franca binding the nation and being the window to the world. However, the standard of achievement in the subject amongst the students remains to be poor. It is hoped that by introducing a concept like metacognition will help to enhance students' achievement in English Language acquisition in schools. NEP 2020 ,in its introduction talks about 'learning how to learn' which is the essence of Metacognition. The Researcher has used multimethod for the study and the result and conclusions proved the program to be effective.**

Index Terms - **English Achievement, Class IX Students, Metacognitive strategy, Metacognitive Strategic Programme, Metacogntiive abilities.**

INTRODUCTION

Metacognition is the process of keeping an eye on one's own thoughts and performance of tasks or more simply metacognition means 'thinking about one's own thinking'(Flavell,1979). Metacognition is considered important for learning as it serves as a strong predictor of academic success (Dunning, Johnson, Ehrlinger & Kruger, 2003; Kruger & Dunning, 1999). The research studies conducted by Kruger and Dunning (1999) indicate that the students with strong metacognitive skills exhibit good academic performance in contrast to the students with poor metacognitive skills.

STATEMENT OF THE PROBLEM

To study the effectiveness of metacognitive strategy on the metacognitive awareness and achievement of English of class IX students in one of the CBSE schools in Pune.

OBJECTIVES OF THE STUDY

1. To know the existing situation of the Metacognitive Awareness among CBSE class IX students in Pune.
2. To develop a metacognitive strategy programme in English for the students of class IX.
3. To Study the effectiveness of the metacognitive strategy programme on
a) the metacognitive awareness of the students
b) English Language Learning in terms of:
i) Achievement   ii) Reactions of students towards the strategy
iii) observations of the researcher during the teaching learning programme
c) on the retention of the students.

LITERATURE REVIEW

Metacognition, as first described by Flavell (1979)refers to the ability to monitor and control thinking during a task and to the longer-term building of knowledge about one's own and others' thinking processes. The literature in the area of metacognition identifies two distinct aspects of metacognition: knowledge about cognition and the regulation of cognition (Brown 1987; Flavell 1979; Veenman et al. 2006).

There is growing evidence of the link between metacognition and academic achievement, even though the assessment of metacognition is fraught with problems. In particular, the monitoring and regulating aspect of metacognition has been shown to affect academic performance (Donaldson and Graham,1999; Hofer,Yu, and Pintrich, 1998). There is evidence that metacognitive strategies play more significant role than other learning strategies because once the learner understands how to regulate his/her own learning through the use of strategies ,language acquisition should proceed at a faster rate(Anderson,2003).

Wafa(2003),Young and Fry(2008) and Yang(2009) have reviewed the use of Metacognitive strategies on the achievement of English Language. They agree that there is a positive relationship between the use of metacognitive strategies and achievement in English.
Glimpse of Research Studies Reviewed
Donnaj M.Stuever (2006) stated that metacognitive strategies encouraged the middle school students to examine their understanding of science concept in a quasi experimental study. Swarna Rao(2012) ,in her correlational study of metacognition from educational perspective on class XI students concluded that there is positive correlation between metacognitive awareness and academic selfconcept of the students as well as between whole brain dominance and metacognitive awareness. T.Yogaraj(2015) conducted a survey on the influence of metacognition and learning styles on problem solving skill of B.Ed trainees.
U Azizah, H Nasrudin(2019) studied metacognitive Skills as a Solution in Chemistry Problem Solving. Based on the results of this study, metacognitive skills used as a solution in chemistry problem-solving. Divyanshi Garg and Monica Sharma(2020) studied metaognition and self criticism as predictors of Happiness among college students.

DISTINGUISHING FEATURES OF THE PRESENT STUDY

1. The present study varies from the above said studies, based on its sample and variables. Hence the investigator has selected this topic for the study.
 2. Components of metacognitive awareness in present research were taught using appropriate approaches wherever is possible.
3. PowerPoint Presentations for students were developed for metacognitive awareness programme along with detailed strategies in logical sequence is the peculiarity of this research.
4.Research Design
As the researcher used different quantitative methods for each objective, the research method can be termed as Multimethod.
Survey method was employed as the first phase of the research in order to fulfil objective 1,ie, to measure the metacognitive awareness of the students in the present research. All students of class IX CBSE schools in

Pune District formed the population. Sample is selected from Pune District, Maharashtra State, India. Sample Size:10 schools – two each from five tehasils in Pune District
The metacognitive Awareness inventory (MAI) is designed by Schraw and Dennison (1994) was used for data collection. The MAI consists of 52 statements to which participant respond by checking the yes or no column. The Survey was conducted over a period of six months from November 2018 to May 2019. The researcher visited 10 schools. Percentage was calculated to analyse the collected data.
After the survey a product was developed which includes the development of an intervention programme based on the Metacogntive Awareness Strategies for English Learning. The product consists of the following:
- The strategic programme for metacognitive awareness used in the study
- Lesson plans
- Achievement Test

After taking suggestions from experts, Intervention programme was finalized.
To test the effectiveness of the programme to fulfil 3rd objective, the researcher followed Experimental Method.The design is experimental with post test only equivalent groups where one group will be experimental and the other one control group.Sample is students of class 9 in one of CBSE Secondary School in Pune-High Vision International School, Somatane Phata.
The pretest of 50 marks designed by the researcher with expert validation is entirely done for the purpose of creating equivalent groups so as to be assigned as Experimental and control groups. In other words, this test was conducted on both the groups to check whether the groups were comparable.
English Achievement Test(Post test) is developed by the researcher to assess the students' understanding with respect to the topics taught using the Programme based on Metacognitive Strategies.
Researcher prepared a feedback form in the form of an open ended questionnaire to record the reactions of the students towards the metacognitive strategy programme. During the implementation of the programme, the researcher recorded her observations using a checklist with statements made by herself.

't' – test and effect size calculation were used to analyse the data.

To know the effectiveness of the metacognitive strategy programme on the retention of the students, Retention Test was made by using parallel form of the Post-Test which was conducted after a month. Coefficient of Correlation was calculated.

Hypothesis 1. There will be no significant difference in the mean gain scores of metacognitive awareness between the students who are taught through metacognitive strategy and those who are taught through traditional method of teaching.

The first hypothesis was tested using 't' test. The probability error obtained was less than 0.05 level. The null hypothesis is rejected at 0.05 level.

Hypothesis 2. There will be no significant difference in the mean gain scores of achievement in English of the students who are taught through metacognitive strategy and those who are taught through traditional method of teaching.

The probability error was less than 0.05 when tested with t test. The Null Hypothesis stands rejected.

Hypothesis 3. There will be no significant relationship between the post test scores and retention test scores on the achievement test for the experimental group.

The coefficient of correlation is round about 0.87 which was found to be positive and significant. Hence retention is high.

CONCLUSION

Metacognitive Strategic Programme was found to be very effective for active participation of students and enhancing their learning achievement in English. This research and it findings in the field of metacognition will be helpful in different stages of assessment and research. The study is important as these strategies picked up by the students could be used for their future learning experiences.

The findings of the study provide information to the educational stakeholders like administrators, policy makers and teaching force about importance of metacognitive awareness, metacognitive strategies and its role in academic achievement. The finding will be helpful for designing and constructing appropriate curriculum, teaching methods order to promote metacognitive strategic learning in secondary education. The product developed in the study is useful for the teachers to be used in their teaching sessions and using the product development blue print

the teachers could develop metacognitive strategic programme for other topics or other subjects too. Similar studies can be conducted in other subject areas like other language subjects and social sciences, for wide range of school or college students., with larger samples from other states of India. Further researches can focus on training teachers and students in metacognitive strategies.

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