A study of the Relationship of Meta cognitive reading strategies with scholastic achievement of Pre-service teachers

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Abstract

The present study analyzes the relationship of metacognitive reading strategies of pre-service teachers of Greater Noida with their scholastic achievement in pedagogy of science. The study was carried out on 100 preservice teachers of Greater Noida. "Metacognitive Awareness of Reading Strategies" prepared by Mokhtari and Richard (2002) was used to measure the metacognitive strategies. The relationship between metacognitive reading strategies and scholastic achievement of preservice teachers of Greater Noida was positive and moderate.

KEYWORDS:

Metacognitive strategies, scholastic achievement in chemistry, preservice teachers

Introduction:

Metacognition is one of the most important concepts in the field of Psychology. There are many definitions of metacognition given by many researchers. According to Flavell (1979) metacognition is the knowledge and cognition about cognitive phenomenon. It is thinking about thinking and to regulate cognitive processes. It also means how we can use the cognitive processes to learn and remember. Metacognition helps the learner to plan, monitor and evaluate his education effectively.

Many studies have been undertaken on metacognition and they have concluded that students who exhibit high level of metacognitive awareness also show high academic achievement (Dunning, Johnson, Ehrlinger and Kruger, 2003;Shraw, 1997; Coutinho, 2007; Turan and Demirel , 2010 Sperling et.al, 2004; Young, A and Fry,Jan.D, 2008).

The present study analyzes the relationship of metacognitive reading strategies of preservice teachers of Greater Noida with their scholastic achievement in pedagogy of science.

Significance of the study:

Learning of science helps in the development of reasoning and problem solving ability. These skills also help the students to solve the problems in their day to day life. Learning of science helps in the cognitive development of the students. Metacognitive skills help in processing the new information and are very important throughout life. Students should be taught metacognitive awareness. In learning it is important to teach metacognitive skills in the classroom since we use metacognition in every activity..

This paper focuses on the metacognitive reading strategies of preservice teachers of Greater Noida and its relationship with their scholastic achievement in pedagogy of science.

Objectives:

1. To study the relationship between metacognitive reading strategies and scholastic achievement of preservice teachers of Greater Noida.
2. To study the relationship between global reading strategy and scholastic achievement of preservice teachers of Greater Noida.
3. To study the relationship between problem solving strategy and scholastic achievement of preservice teachers of Greater Noida.
4. To study the relationship between support reading strategy and scholastic achievement of preservice teachers of Greater Noida.

Hypotheses:

1. There is positive and high correlation between metacognitive reading strategies and scholastic achievement of preservice teachers of Greater Noida.
2. There is positive and high correlation between global reading strategy and scholastic achievement of preservice teachers of Greater Noida.
3. There is positive and high correlation between problem solving strategy and scholastic achievement of preservice teachers of Greater Noida.
4. There is positive and high correlation between support reading strategy and scholastic achievement of preservice teachers of Greater Noida.

Methodology

Survey method was used for the study. The population for the study consisted of preservice teachers of Greater Noida.

Sample:

Preservice teachers of Greater Noida were randomly selected. The total number of sample was 100 out of which 56 were male and 44 were female preservice teachers.

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Tool used:

The data was collected by using the tool of "Metacognitive Awareness of Reading Strategies" prepared by Mokhtari and Richard (2002).

Results and findings:

The data was collected and coefficient of correlation was found between Metacognitive Reading Strategies and Scholastic Achievement. Coefficient of correlation was also found between Global Reading Strategy, Problem Solving Strategy and Support Reading Strategy and Scholastic Achievement in chemistry.

Table 1

Correlation between Metacognitive Reading Strategies and Scholastic Achievement of preservice teachers

Reading Strategies and Scholastic Achievement.	Correlation 'r'
Metacognitive Reading Strategies and Scholastic Achievement	0.61
Global Reading Strategy and Scholastic Achievement	0.67
Problem Solving Reading Strategies and Scholastic Achievement	0.68
Support Reading Strategy and Scholastic Achievement	0.62

Results and Findings:

Results in Table 1 reveal that there is a positive and moderate correlation (0.61) between metacognitive reading strategies and scholastic achievement of preservice teachers of Greater Noida.

- Hence, Hypothesis 1 There is positive and high correlation between metacognitive reading strategies and scholastic achievement of preservice teachers of Greater Noida is accepted.
- Similarly, there is moderate and positive correlation between global reading strategy and scholastic achievement (0.67). Hence, Hypothesis 2 There is positive and high correlation between global reading strategy and scholastic achievement in pedagogy of science of preservice teachers of Greater Noida accepted.
- There is positive and high correlation between problem solving strategy and scholastic achievement in science (0.68). Hence, Hypothesis 3 There is positive and high correlation between problem solving strategy and scholastic achievement in pedagogy of science of preservice teachers of Greater Noida is accepted.

  There is positive and high correlation between support reading strategy and scholastic achievement in pedagogy of science of preservice teachers of Greater Noida as the coefficient of correlation is 0.62. Hence, Hypotheses 4 also stand accepted.

Conclusion:

Metacognition contributes to successful learning. It helps the individuals to manage their cognitive skills better. The students should be made aware of Metacognition and how to use metacognition for successful learning. It will help students to minimize their errors and help the learners in problem solving. The students should be guided to use metacognitive abilities in learning.

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