

EFFECTIVITY OF SELF-REGULATED LEARNING IN PSYCHOLOGY

By

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ABSTRACT

The present study illuminates the efficacy of self-regulated learning in learning psychology at Master of Education level in Bharathiar University, Coimbatore. Experimental method was adopted for the study. Qualitative and quantitative approach was adopted in the study. Twenty seven students studying at M.Ed in Bharathiar University were taken as samples for the study. Researcher's self-made Achievement tests were used as tools for the study and validity and reliability were well established for these two tools. Descriptive and inferential statistics were used for the study. Single group experimental method was followed in the study. After constructing an achievement test based on blue print, a pre-test was administered towards the 27 students and evaluated the answer scripts. The following framed activities were given to the students. Activity1: Collecting the information from the internet on the given topic. Activity2: Collecting information from the library. Activity 3: Searching the information related to the topic from given package. Activity 4. Collecting information on the topic by attending seminar. After involving in the above mentioned activities, students were tested by using another achievement test which was considered as a post-test for the study. In the pre-test, students scored only 34 percentage of marks in lecture method but in self-regulated learning students scored 78 percentage of marks. It proves that the efficacy of Self-regulated Learning is more effective by using self-regulated activities. There is a significant difference in achievement mean score between pre-test and post-test in learning psychology. Self-regulated learning is more effective than lecture method in learning psychology at Master of Education level in Bharathiar University, Coimbatore.

Keywords: Self-regulated Learners, Master of Education, Self-efficacy.

INTRODUCTION

The term **self-regulated** can be used to describe learning that is guided by *metacognition*, *strategic action* (planning, monitoring, and evaluating personal progress), and *motivation to learn* (Butler & Winne, 1995; Winne & Perry, 2000; Perry, Phillips, & Hutchinson, 2006; Zimmerman, 1990). Self-regulated learning may be helpful to improve the qualitative learning at Higher Education level. Optimum level of the University teaching is oriented towards the lecture method and Teacher-centered methods which are not fruitful to enhance the understanding skill and application skill of the learners in their learning. Lecture method and some other approaches fail to follow the strategic action such as planning, monitoring and evaluating. In the method of learning, teachers plan the content to study through self-regulated learning strategies and monitor the

learners, after achieving the competency and goals of the course, the learners are evaluated by themselves as well as teachers. Self-learning motivated the learners and slow learners scored more marks in Learning multiplication (Singaravelu, G 2006). Self-regulated learning was transacted and practiced in the classroom of Master of Education course in Bharathiar University, Coimbatore, India for finding out its impact.

1. Need of the Study

Learning Psychology through conventional method did not evoke interest to the learners of Master of Education. Learners have acquired more experiences in the methods of teaching in different disciplines from their Bachelor of Education courses. Teacher centered Education applied in classroom transaction in the post graduate level made the students dependent of pronunciation of the instructors who encouraged to learn whatever he has achieved, but

it failed to encourage the learners to learn in their own phase. Hence the researcher attempted to find an innovative strategy to eliminate the problems in learning psychology. The researcher determined to employ the Self-regulated learning in the classroom of post graduate level in Education for teaching Psychology.

2. Review of related studies

The following studies supported the Self-regulated learners who hold incremental beliefs about intelligence (as opposed to the fixed views of intelligence) and attribute their successes or failures to factors (e.g., effort expended on a task, effective use of strategies) within their control (Dweck & Leggett, 1988; Dweck, 2002). Finally, students who are self-regulated learners believe that opportunities to take on challenging tasks, practice their learning, develop a deep understanding of subject matter, and exert effort which will give rise to academic success (Perry et al., 2006). In part, these characteristics may help to explain why self-regulated learners usually exhibit a high sense of Self-efficacy (Pintrich & Schunk, 2002). In Educational psychology literature, researchers have linked these characteristics to success in and beyond school (Pintrich, 2000; Winne & Perry, 2000). Zimmerman et al specified three important characteristics: self-observation (monitoring one's activities), self-judgment (self-evaluation of one's performance) and self-reactions (reactions to performance outcomes). Winne & Marx posited that motivational thoughts and beliefs are governed by the basic principles of cognitive psychology, which should be conceived in information-processing terms. Self-assessing learning motivates the learners to learn more (Ravi,R,&Xavier, P 2007). No studies concentrate on Master of Education level, like the innovative study implementing in Educational courses may revamp and ameliorate the quality of Education. Hence the researcher selected the study in Master of Education level.

3. Objectives

1. To identify the existing problems in learning Psychology of the Students of M.Ed studying in Bharathiar University, Coimbatore.

2. To find out the significant difference in achievement mean scores between Conventional method and Self-regulated Learning in learning Psychology.

3. To measure the impact of the Self-regulated learning in learning Psychology.

4. Hypotheses

1. Students of M.Ed in Bharathiar University, Coimbatore had failed to score marks in their core paper Psychology when it was taught through conventional lecture method.

2. There is no significant difference in mean achievement score between conventional method and Self-regulated learning method in learning Psychology.

3. Self-regulated learning method is more effective than traditional method in learning Psychology.

5. Delimitations

1. Students of M.Ed in Bharathiar University, Coimbatore alone were taken for the study.

2. Advanced Educational psychology alone was taken for the study.

3. Syllabus of Bharathiar University was adopted for the study

6. Methodology

Single group experimental method was adopted for the study.(pre-test and post-test to the same group). Twenty seven students were taken for the study. At the beginning, traditional methods of teaching Psychology were given and the students performances were tested by administering Pre-test (achievement test) which scores were tabulated. Secondly, the same 27 students were considered for the treatment of using innovative method in learning Psychology through Self-regulated learning method. The same tool was not used for the Post-test but the items of the tool on the basis of blue print were prepared and administered as post-test for analyzing the study. Equal weightage was maintained in both tools. Hence, experimental method and qualitative and quantitative approaches were adopted for the study.

6.1 Subject

Sample selected for the pilot study

Ten students were selected based on the marks scored in

the first semester examinations.

Sample selected for the Final study

Twenty seven students (18 female and 9 male) studying in Master of Education at Bharathiar University, Coimbatore were selected for the study.

6.2 Instrumentation

Researcher's self-made Achievement-tests were used as the instrumentations for the study. Two types of achievement tests were prepared on the basis of blue-print and equal weightage for the both tools, in which one tool was used for administering for pre-test and another tool was used for administering the post-test. The tool was constructed on the pattern of semester examination.

Description of instrumentation

Tools selected for the pilot study

Researcher self-made two achievement tests were prepared on the basis of blue print of the scheme of examination. One tool was used for the pre-test and another tool named achievement test based on the same weightage given in the pre-test was used for the post-test. Both the tests carried 40 marks, designed as:

Objective type questions: 10 items x 1 mark = 10 marks

Short answer type questions: 5 items x 2 marks = 10 marks

Essay type questions: 2 questions x 10 marks = 20 marks

Reliability of the tool

Test-retest method was used for the study. The co-efficient correlation was found to be 0.65 in the tool through test-retest method. Both achievement tests had the same value of co-efficient correlation 0.65.

Validity of the tool

Content validity was established for the both achievement tests of pre-and-post tests through expert suggestions. Hence reliability and validity were properly established for the study.

Tool selected for the Final study

The pre-test question paper was not used for the post-test. The weightage of the question paper of the pre-test was maintained the same for the post-test question paper. The same items of the tool of the pre-test and marks were

adopted in the post-test. The following items and marks were used in the final study.

Objective type questions: 10 items x 1 mark = 10 marks

Short answer type questions: 5 items x 2 marks = 10 marks

Essay type questions: 2 questions x 10 marks = 20 marks

6.3 Statistical Technique

Percentage, mean, SD and t-test were adopted in the study for analyzing the tabulated data.

6.4 Steps adopted in the Study

The following were the steps adopted in the study.

- Finding the learning impediments of the learners of Master of Education in scoring marks in existing conventional methods.
- Preparing instruments and consulting with eminent professors.
- Establishing validity and reliability of the tool.
- Administering pre-test to the selected sample.
- Finding the problems through pre-test.
- Preparation of planning of the learning.
- Preparation of activities to be practiced by the students.
- Providing activities for collecting the materials from internet and insisting them to present these activities in the classroom and discussion was made.
- Administering post-test by an achievement test.
- Analysing the results.
- Finding the impact of Self-regulated learning in learning Foundations of Psychology.

6.5 Activities

The following treatments were given to the students as self-regulated learning.

1. Teacher suggests the topic to the learners.
2. Students were asked to collect relevant material from the library.
3. Students are made to identify the website address for the suitable content of psychology.
4. A package was given to the students to learn the content by themselves.

5. A seminar on psychology in the form of CDs were distributed for their self-learning.

6. Self-monitoring of the students was the liberated strategy used in it .

7. Self-evaluation was done by the learners themselves.

7. Data Analysis

The average mean scores of the pre-test and post-test results were calculated and tabulated (see Table 1, 2 and 3).

Hypotheses Testing

Hypothesis: 1

Students of M.Ed in Bharathiar University, Coimbatore had failed to score marks in their core paper of Psychology in conventional method.

Table 1 shows the pre-test percentage scores (34%) is less than post-test percentage of scores (78%) in the five items of the content listed, which confirm the problems in learning psychology through conventional method.

Hypothesis: 2

There is no significant difference in mean achievement score between conventional method and Self-regulated learning in learning Psychology.

Table 2 shows that the calculated t-value (8.38) is greater than table value (2.00). Hence null hypothesis is rejected at 0.05 level. It shows that there is a significant difference between conventional method and Self-regulated learning in learning Psychology.

Hypothesis: 3

Self-regulated learning method is more effective than traditional method in learning Psychology.

Table 3 indicates the impact of Self-regulated learning in scoring more marks than conventional learning. Seven Students scored 80% of marks in conventional method and 16 students scored 80% of marks through self-regulated learning in Psychology. Mean scores also witnessed the effectiveness of Self-regulated learning by pre-test mean score of 6.80 and post-test mean score of 15.60. Hence Self-regulated learning method is more effective than traditional method in learning Psychology.

| Units no | Content of the core subject | Conventional method percentage score | Self-Regulated learning method percentage score |
|----------|--|--------------------------------------|---|
| 1 | Psychology as a scientific study | 7.34 | 15.18 |
| 2 | Human development | 6.04 | 14.26 |
| 3 | Intelligence, cognition and creativity | 6.08 | 15.55 |
| 4 | Psychology of Learning and instruction | 8.02 | 18.09 |
| 5 | Motivation and personality | 6.52 | 14.92 |
| Total | | 34.00 | 78.00 |

Table 1. Scores of pre test and post test

| Groups | Mean | S.D | t | df | Result |
|-------------------------|-------|------|------|----|-------------|
| Conventional | 6.80 | 3.72 | 8.38 | 52 | significant |
| Self-regulated Learning | 15.60 | 4.07 | | | |

Table 2. Significant difference means scores of pre-test and post-test

| Strategies | Students involved in the study | Number of students scored 80% marks in both tests | Mean scores difference |
|--------------------------------|--------------------------------|---|------------------------|
| Conventional | 27 | 7 students pre-test | 6.80 |
| Self-regulated Learning method | 27 | 16 students post-test | 15.60 |

Table 3. Difference between pre-test and post-test

8. Findings

1. Students of M.Ed in Bharathiar University, Coimbatore had failed to score marks in their core paper of Psychology, in conventional method.

2. There is significant difference in mean achievement score between conventional method and Self-regulated learning in learning Psychology.

3. Self-regulated learning method is more effective than traditional method in learning Psychology.

9. Educational Implications

1. The study can be extended to those who are in M.Ed colleges and Universities.

2. Self-regulated Learning may be applied to bloomers (slow learners) in Higher Education.

3. Self-regulated Learning can be introduced in science subjects.

4. It may be used to encourage and activate the gifted

learners.

5. The self-paced learning may enhance the intellectual ability of the learners.

6. Self-regulated learning paves way to ameliorate the creativity of the learners.

Conclusion

The researcher conducted the study among the M.Ed students to find out the impact of Self-regulated learning in learning psychology. The students of M.Ed had monotony in the conventional method but the innovative learning increased the enthusiasm of the learners. Higher Education stretches its hands towards the development of creativity of the learners. Using lucrative method in teaching learning process in Higher Education may promote the intellectual ability of the learners in expected way. Conventional methods displeased the learners to learn effectively and the score of the learners appeared very low. Finding innovative methods like Self-regulated learning may promote the interest of the learners and it also eliminates the problems of the learners and will help to increase the scoring in the particular subject. Hence Self-regulated Learning is more effective in learning psychology at Master of Education classroom. Fatigue of the students were refreshed by the Self-regulated Learning. Implementing innovative methods and strategies will revamp the quality of Higher Education.

References

- [1]. Butler, D. L. & Winne, P.H.(1995) Feedback and self-regulated learning: A theoretical synthesis. *Review of Educational Research*, 65, 245-281.
- [2]. Dweck, C. S. (2002). Beliefs that make smart people dumb. In R. J. Sternberg (Ed.), *Why smart people do stupid things*. New Haven: Yale University Press.
- [3]. Dweck, C.S., & Leggett, E.L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95, 256-273.
- [4]. Perry, N.E., Phillips, L., & Hutchinson, L.R. (2006). Preparing student teachers to support for self-regulated learning. *Elementary School Journal*, 106, 237- 254.
- [5]. Pintrich, P.R. & Schunk (2000). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of Educational Psychology*, 92, 544-555.
- [6]. Ravi.R, & Xavier.P (August-October 2007). Activity Based Learning as Self-Accessing strategy to Promote Learning Autonomy. *i-manager's Journal on Educational Psychology*, Vol 1. No.2, 7-9.
- [7]. Singaravelu,G(2006). Embellishment of Student Leadership in Learning Multiplication at Primary Level. *i-manager's Journal on School Educational Technology*, Vol 2. No.2, 40-43.
- [8]. Winne, P.H. & Perry, N.E. (2000). Measuring self-regulated learning. In P. Pintrich, M. Boekaerts, & M. Seidner (Eds.), *Handbook of self-regulation* (p. 531-566). Orlando, FL: Academic Press.
- [9]. Zimmerman, B.J. (1990). Self-regulated learning and academic achievement: An overview. *Educational Psychologist*, 25, 3-17.

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