Factors Responsible For Promoting Rote Learning Among Students At Tertiary Level

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ABSTRACT

A study, factors responsible for promoting rote learning among students at tertiary level was conducted to explore the factors associated with curriculum, teachers and students which are responsible for promoting rote learning. All 70 teachers serving in University of Loralai constituted the population of the study. Out of the total population 60 teachers were purposively selected from University of Loralai as sample of the study. A closed ended questionnaire was chosen for data collection. The questionnaire included a variety of questions based on Likert scale. The collection data was analyzed by using percentage as statistical tool. Findings of the study concluded that majority of the respondents agreed that subject center curriculum is responsible in promoting rote learning. Most of the subjects were agreed that increase breadth and width of course content is responsible to promote rote learning. Maximum participants agreed that lack of logical sequence in course content is responsible to promote rote learning. Half of the participants were agreed that content beyond the society needs is responsible to promote rote learning. More than half of the participants were agreed that a less or no reflection of bloom taxonomy in education objectives is responsible to promote rote learning. Large number of subjects agreed that race of marks is responsible for promoting students rote learning. More than half of respondents were agreed that increase number of assignments is responsible for promoting students rote learning. More than half participants agreed that increase number of exams rounds is responsible for promoting students rote learning. Maximum subjects were agreed that discouraging attitude of teacher toward conceptual learning is responsible for promoting students rote learning.

Keywords: Rote Learning, Course Content, Teachers, Students.

INTRODUCTION

1.1   Background of the study

Rote learning is the process of memorizing facts through repetition. The key goal is to ignore knowing knowledge and maintain it for as long as possible. Practice, repetition, and memorization are characteristics of rote learning (Li, 2004).

Researchers want to know how students learn, how they learn, and why they select a certain learning method. The two main categories of learning strategies are the surface learning approach and the

deep learning strategy. The deep approach engages students in the learning process to understand the subject on a deeper level, as opposed to the surface technique, often known as rote learning, which involves memorization of information without understanding the subject on a deeper level (Duff, 1999).

In Pakistan, learning often takes place in a teacher-centered environment, with pupils serving as passive learners whose main duty is to correctly recall the content. As credit is awarded for accurate information recall during tests, teachers' lectures are evaluated on the basis of knowledge reproduction (Safdar, 2013). According to Christie and Afzaal (2005), rote learning is the only method utilized to assess students for the HSC (Higher Secondary Certificate) and SSC (Secondary School Certificate) exams.

They continue using this approach once they go to a university. The ways in which students learn are crucial in determining how well any education will turn out. Students use a range of learning styles as a result of these pressures. Students can choose from a variety of learning environments created by courses and instructional techniques (Mayya et al., 2004).

Students are encouraged to use the surface leaning technique for a variety of reasons. These include assessments, the rewarding process, instruction, work overload, the transmission of subject-matter information, and student perceptions of the subject matter (Hasnoor et al., 2013).

Researchers are interested in how pupils learn, how they learn, and why they choose a certain technique of learning. The two primary categories of learning strategies are surface learning and deep learning. In contrast to the surface technique, often known as rote learning, which includes memorization of material without getting the deeper knowledge, the deep approach involves students in the study process to acquire the deeper comprehension of the subject (Duff et al., 2003).

1.2   Problem Statement

Learning can be defined as a relatively permanent change in behaviour. Learning can take place through different ways. Some individuals learn through memorizing and some with the help of activities. In Pakistani schools' students often learn through rote memorization. The present study was designed to discover the factors that are responsible for promoting rote learning among students at university of Loralai.

1.3   Objectives of study
1. To identify the factors related to teachers that are responsible for promoting rote learning among students at University of Loralai
2. To find out the factors related to students that are responsible for promoting rote learning among students at University of Loralai
3. To determine the factors related to course content that is responsible for promoting rote learning among students at University of Loralai

1.4   Research Questions
1. What are the factors related to teachers that are responsible for promoting rote learning among students at University of Loralai?
2. What are the factors related to students that are responsible for promoting rote learning among students at University of Loralai?
3. What are the factors related to course content that is responsible for promoting rote learning among students at University of Loralai?

1.5   Significance of the study
After this study, awareness will be developed among the teachers, course

makers and students about negative effects of rote learning at University of Loralai which will be helpful for teachers, psychologists, curriculum developer and educationalist to eliminate the concept of rote learning and introduce/promote new ways of conceptual learning.

Literature Review

Gaining information can be thought of as the process of learning. The way in which students approach the learning process is crucial for education and they employ a number of learning strategies (Subasinghe &Wanniachchi, 2003).

Education's two fundamental goals are information transfer and knowledge retention. In contrast to retention, which is the learner's capacity to recollect material, transfer refers to students' ability to convey knowledge in an efficient manner.

Students' ties to learning are influenced by two factors: environmental influence and learning motivation. As a result, both motivation and the teaching and learning environment have an impact on the overall learning strategy. In order to support academic achievement, knowledge acquisition emphasizes rote learning, a sort of cognitive processing that is obtained through repetition and rehearsal of knowledge (Morton, 2011).

Despite being generally regarded as a poor technique of learning, rote learning is a cultural predilection that Burmese students explicitly utilize for exam accuracy. Rote learning can help with better understanding and information accuracy and need not only be mindless repetition. In eastern philosophy, rote learning is seen as an essential tool for fostering deeper comprehension because it will help students develop their critical thinking skills, in contrast to how it is perceived in the west, where it is thought to leave little room for comprehension (Sinhaneti & Kyaw, 2012).

Intrinsic and extrinsic motivation both have an impact on learning processes. Achievement was examined in respect to the two motivating areas. He divided the first-year students in the education department into two groups, one eager to read the assigned text and the other not so keen. Each of these groups was further divided by him. One group was given instructions on how to convey the information, but not the other group (Draper, 2013).

When given the task of presenting information but lacking interest in the text, students tended to take a surface approach; in contrast, students who were given the task of presenting information but showed interest in the text shown stronger intrinsic motivation and chose a deep approach. Although students frequently choose the surface strategy as a short cut, the deep approach is more successful, hence exam preparation takes longer (Kember et al., 1995).

Learning happens in three stages: intake, process, and output. The curriculum is an input, and the knowledge of the material is processed to provide performance-based output (Biggs, 1989). Students that use the deep learning method perform better on exams than those who use the surface learning method (Mayya et al., 2004).

Learning strategies and program success also have a favorable relationship, while academic success and the surface approach have a negative link. A study on education and psychology students conducted in Belgium found that students who employed a surface approach to learning in a pre-university context did not transition to a deep approach. However, research has shown that deep learning is often used by university students in Malaysia (Duckwall et al., 1991).

Gaining information can be thought of as the process of learning. Numerous learning styles are employed by

students, and how they go about learning is crucial for education. Education's two fundamental goals are information transfer and knowledge retention. Unlike retention, which refers to a learner's capability to recollect information, transfer concerns pupils' ability to convey knowledge in an efficient manner (Meyer, 2002).

2.2 Categorization of Rote Learning

According to Subasinghe and Wanniachchi (2009), rote learning, mental associations, the use of images and sounds, and systematic reviewing are the four components of memory strategy.

Creating mental linkages
1. Dividing language-related content into meaningful units before classifying or reclassifying it.
2. Connecting and extending previously learned concepts with new language knowledge.
3. Adding fresh vocabulary to a setting

Applying images and sounds
1. Using metaphors
2. Semantic mapping
3. Employing keyword
4. Memory representation of sounds

Reviewing well
Periodic evaluations, with intervals carefully planned. A review is one example. Repeat the instruction process to improve your memory for the fresh material in the target language. After the first lesson, for example, for 10 minutes, 20 minutes, an hour or two, and so on.

2.3 The procedure of rote learning

Hasnoor et al. (2013) outline the following stages for applying the rote learning strategy:
a) During instruction, the teacher distributes the content.

b) The students make their own notes after the teacher compiles a list of challenging words from the readings.
c) The instructor instructs the class to memorize the word. The following strategies of rote learning might be applied.
1. Type the words down.
2. Combine matched items.
3. Read a word out loud or silently.
4. Keep reading the word.
5. Acquire word lists.
6. Go over the word.

2.4 View of rote learning

Rote Learning Strategy: A Bad View
Some academics consider RL to be an outmoded and flawed MS. The passive learning that many academics detest or find objectionable seems to be accentuated by RL techniques. Also known as surface level learning, learning by rote is the mechanical application of memory without necessarily understanding what is recalled. Meyer (2002) asserts that RL seems to be a barrier to overcoming life's numerous challenges.

Meritorious view of rote learning
The literature review demonstrates positive opinions of RL in vocabulary learning in addition to the negative perceptions of RL. RL is acknowledged as a cultural preference and an effective way to learn the basics early on in the language learning process. It is thought that RL can assist students improve their fundamental learning abilities and that RL may increase the accuracy of their information. Positive perceptions of RL also show that it need not be pointless repetition; rather, it may help reinforce learning and improve comprehension.

2.5 Rote Learning Effect

In order to ensure that children can communicate effectively with others in every circumstance, it should also be taught to them from the very beginning. It is

common knowledge that there are four language skills: speaking, reading, and writing. The writer will concentrate primarily on vocabulary because it is essential to mastering English. By employing the proper method, the pupils' vocabularies will grow and be expanded. Many pupils have adopted the repetitious learning approach to increase their vocabulary. In comparison to other vocabulary learning techniques, rote learning has been found to be more successful at increasing passive vocabulary knowledge. The researcher can infer from the aforementioned justifications that rote learning can help pupils become more proficient in their language (Rohmi, 2017).

2.6   Related Studies

A study conducted on effect of rote learning on academic achievement of students. The findings indicate a negative relationship between academic achievement and memorization skills. Deep learning is important in high achievers compared to low achievers. Additionally, a comparison of the learning preferences of boys and girls revealed that both favoured deep learning equally. Because graduate and undergraduate students prefer the same learning strategies, learning strategy and educational level are unrelated (Ahmad & Ahmad, 2017).

A study was carried out to determine that academic performance grade point average (GPA) could be predicted by self-reported frequency of memorizing and recitation, verbatim memory performance, and self-efficacy. The students' verse memory, word memory, experience with memorization and recitation, and overall self-efficacy were all evaluated. The findings indicate that, despite the focus on activities that alter the format of the material to be learned in college, replication-based activities may still be advantageous (Pilotti et al., 2002).

Rote learning is a learning method in which the components of a piece of information are repeatedly practiced. This study aimed to assess how Rote Learning affected students' academic achievement. The study's goals were to investigate how rote learning affected students' reading, writing, speaking, and listening skills as well as their listening and speaking comprehension. The null hypothesis was investigated in order to meet these goals. The population of the study consisted of 319 881 grade nine students in Lokoja Kogi. From the population, fifty pupils were chosen as a sample. Before being separated into control and experimental groups, the students took a pre-test. While the experimental group was taught using Rote Learning, the control group's instruction remained unaltered. For the research of the experimental group, various Rote learning techniques including Chunking, Rhyming, Mediation, Recital, and Bridging were applied. ANOVA (analysis of variance) and the paired sample T-test were used to assess the data. The findings indicated that pupils who were taught via rotational learning performed better than non-rotational learners. Rote Learning had a successful function in the instruction of fundamental language skills in the study of English, according to the study. The findings support the notion that rote learning can be crucial to the acquisition of the English language (Hoyland et al., 2009).

Research Methodology

3.1   Nature of the study

The research is descriptive in nature, and the researcher gathered information on the study's subject's current situation.

3.2   Population

The population of the study consisted of all 70 currently employed teachers at the University of Loralai.

3.3 Sample of the study

Out of the total population 60 teachers were purposively selected from different department of University of Loralai.

3.4 Research instrument

A closed ended questionnaire was chosen for data collection. The questionnaire included a variety of questions based on Likert scale. The questionnaire was divided in three different sections. The information obtained could assist the researcher when interpreting results.

3.5 Data collection

The researcher personally visited the sampled schools to get the data.

3.6 Data analysis

The collection data was analyzed by using percentage as statistical tool.

ANALYSIS OF DATA

Table 4.1 Subject center curriculum is responsible to promote rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	3	5.0	5.0	5.0
DA	7	11.7	11.7	16.7
N	2	3.3	3.3	20.0
A	26	43.3	43.3	63.3
SA	22	36.7	36.7	100.0
Total	60	100.0	100.0	

Table 4.1 described 80% of the respondents agreed that subject center curriculum is responsible in promoting rote learning.

Table 4.2 Increase breadth and width of course content is responsible to promote rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	5	8.3	8.3	8.3
DA	13	21.7	21.7	30.0
N	4	6.7	6.7	36.7
SA	13	21.7	21.7	58.3
A	25	41.7	41.7	100.0
Total	60	100.0	100.0	

Table 4.2 depicted 63.4% of the subjects were agreed that increase breadth and width of course content is responsible to promote rote learning.

Table 4.3 Lack of logical sequence in course content is responsible to promote rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	2	3.3	3.3	3.3
DA	6	10.0	10.0	13.3
N	3	5.0	5.0	18.3
SA	22	36.7	36.7	55.0

A	27	45.0	45.0	100.0
Total	60	100.0	100.0	

Table 4.3 indicates 81.7% teachers agreed that lack of logical sequence in course content is responsible to promote rote learning.

Table 4.4 Content beyond the society needs is responsible to promote rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	5	8.3	8.3	8.3
DA	15	25.0	25.0	33.3
N	13	21.7	21.7	55.0
SA	13	21.7	21.7	76.7
A	14	23.3	23.3	100.0
Total	60	100.0	100.0	

Table 4.4 shows 45% participants were agreed that content beyond the society needs is responsible to promote rote learning.

Table 4.5 A less or no reflection of bloom taxonomy in education objectives is responsible to promote rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	3	5.0	5.0	5.0
DA	11	18.3	18.3	23.3
N	7	11.7	11.7	35.0
SA	15	25.0	25.0	60.0
A	24	40.0	40.0	100.0
Total	60	100.0	100.0	

Table 4.5 revealed 65% participants were agreed that a less or no reflection of bloom taxonomy in education objectives is responsible to promote rote learning.

Table 4.6 Race of marks is responsible for promoting students rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	4	6.7	6.7	6.7
DA	4	6.7	6.7	13.3
N	1	1.7	1.7	15.0
SA	27	45.0	45.0	60.0
A	24	40.0	40.0	100.0
Total	60	100.0	100.0	

Table 4.6 showed 85% subjects agreed that race of marks is responsible for promoting students rote learning.

Table 4.7 Increased number of assignments is responsible for promoting students rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	6	10.0	10.0	10.0
DA	12	20.0	20.0	30.0
N	3	5.0	5.0	35.0
SA	22	36.7	36.7	71.7
A	17	28.3	28.3	100.0
Total	60	100.0	100.0	

Table 4.7 tells 65% respondents were agreed that increase number of assignments is responsible for promoting students rote learning.

Table 4.8 Increased number of exams rounds is responsible for promoting students rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	6	10.0	10.0	10.0
DA	10	16.7	16.7	26.7
N	9	15.0	15.0	41.7
SA	12	20.0	20.0	61.7
A	23	38.3	38.3	100.0
Total	60	100.0	100.0	

Table 4.8 described 58.3% teachers agreed that increase number of exams rounds is responsible for promoting students rote learning.

Table 4.9 Discouraging attitude of teacher toward conceptual learning is responsible for promoting students rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	3	5.0	5.0	5.0
DA	4	6.7	6.7	11.7
N	1	1.7	1.7	13.3
SA	30	50.0	50.0	63.3
A	22	36.7	36.7	100.0
Total	60	100.0	100.0	

Table 4.9 indicates 86.7% participants were agreed that discouraging attitude of teacher toward conceptual learning is responsible for promoting students rote learning.

Table 4.10 Lack of conducive learning environment is responsible for promoting students rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
DA	4	6.7	6.7	6.7
N	7	11.7	11.7	18.3
SA	21	35.0	35.0	53.3
A	28	46.7	46.7	100.0
Total	60	100.0	100.0	

Table 4.10 reveals 81.7% participants agreed that lack of conducive learning environment is responsible for promoting students rote learning.

Table 4.11 Over burden on teacher is responsible for promoting rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	2	3.3	3.3	3.3
DA	8	13.3	13.3	16.7
N	6	10.0	10.0	26.7
SA	13	21.7	21.7	48.3
A	31	51.7	51.7	100.0
Total	60	100.0	100.0	

Table 4.11 shows 73.4% subjects were agreed that over burden on teacher is responsible for promoting rote learning.

Table 4.12 Lack of effective teaching methods are responsible for promoting rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	1	1.7	1.7	1.7
DA	6	10.0	10.0	11.7
N	1	1.7	1.7	13.3
DA	31	51.7	51.7	65.0
A	21	35.0	35.0	100.0
Total	60	100.0	100.0	

Table 4.12 indicates 86.7% respondents were agreed that lack of effective teaching methods is responsible for promoting rote learning.

Table 4.13 Lack of appreciation is responsible for promoting rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	1	1.7	1.7	1.7
DA	9	15.0	15.0	16.7
N	8	13.3	13.3	30.0
SA	20	33.3	33.3	63.3
A	22	36.7	36.7	100.0
Total	60	100.0	100.0	

Table 4.13 reveals 70% participants were agreed that lack of appreciation is responsible for promoting rote learning.

Table 4.14 Teacher incompetency is responsible for promoting rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	2	3.3	3.3	3.3
DA	3	5.0	5.0	8.3
N	6	10.0	10.0	18.3
SA	20	33.3	33.3	51.7
A	29	48.3	48.3	100.0
Total	60	100.0	100.0	

Table 4.14 tells 81.6% teachers were agreed that teacher incompetency is responsible for promoting rote learning.

Table 4.15 Students non serious attitude toward learning is responsible for promoting rote learning.

	Frequency	Percent	Valid Percent	Cumulative Percent
SDA	1	1.7	1.7	1.7
DA	3	5.0	5.0	6.7
N	5	8.3	8.3	15.0
SA	27	45.0	45.0	60.0
A	24	40.0	40.0	100.0
Total	60	100.0	100.0	

Table 4.1.15 described 85% subjects were agreed that students non serious attitude toward learning is responsible for promoting rote learning.

5.1   Findings

1. Table 4.1 described 80% of the respondents agreed that subject center curriculum is responsible in promoting rote learning.
2. Table 4.2 depicted 63.4% of the subjects were agreed that increase breadth and width of course content is responsible to promote rote learning.
3. Table 4.3 indicates 81.7% teachers agreed that lack of logical sequence in course content is responsible to promote rote learning.
4. Table 4.4 shows 50% candidates were agreed that content beyond the society needs is responsible to promote rote learning.
5. Table 4.5 revealed 65% participants were agreed that a less or no reflection of bloom taxonomy in education objectives is responsible to promote rote learning.
6. Table 4.6 showed 85% subjects agreed that race of marks is responsible for promoting students rote learning.
7. Table 4.7 tells 65% respondents were agreed that increase number of assignments is responsible for promoting students rote learning.
8. Table 4.8 described 58.3% teachers agreed that increase number of exams rounds is responsible for promoting students rote learning.
9. Table 4.9 indicates 86.7% participants were agreed that discouraging attitude of teacher toward conceptual learning is responsible for promoting students rote learning.
10. Table 4.10 reveals 81.7% participants agreed that lack of conducive learning environment is responsible for promoting students rote learning.
11. Table 4.11 shows 73.4% subjects were agreed that over burden on teacher is responsible for promoting rote learning.
12. Table 4.12 indicates 86.7% respondents were agreed that lack of effective teaching methods is responsible for promoting rote learning.
13. Table 4.13 reveals 70% participants were agreed that lack of appreciation is responsible for promoting rote learning.
14. Table 4.14 tells 81.6% participants were agreed that teacher

incompetency is responsible for promoting rote learning.

15. Table 4.15 described 85% subjects were agreed that students non serious attitude toward learning is responsible for promoting rote learning.

5.2 Conclusions

Majority of the respondents agreed that subject center curriculum is responsible in promoting rote learning. Most of the subjects were agreed that increase breadth and width of course content is responsible to promote rote learning. Maximum participants agreed that lack of logical sequence in course content is responsible to promote rote learning. Half of the participants were agreed that content beyond the society needs is responsible to promote rote learning. More than half of the participants were agreed that a less or no reflection of bloom taxonomy in education objectives is responsible to promote rote learning. Large number of subjects agreed that race of marks is responsible for promoting students rote learning. More than half of respondents were agreed that increase number of assignments is responsible for promoting teachers rote learning. More than half participants agreed that increase number of exams rounds is responsible for promoting teachers' rote learning. Maximum subjects were agreed that discouraging attitude of teacher toward conceptual learning is responsible for promoting rote learning. Majority number of participants agreed that lack of conducive learning environment is responsible for promoting students rote learning. Most of the subjects were agreed that over burden on teacher is responsible for promoting rote learning. Large number of respondents were agreed that lack of effective teaching methods is responsible for promoting rote learning. More than half of the participants were agreed that lack of appreciation is responsible for promoting

rote learning. Maximum number of subjects were agreed that teacher incompetency is responsible for promoting rote learning. Majority of subjects were agreed that students non serious attitude toward learning is responsible for promoting rote learning.

5.4 Recommendations

1. To eliminate or lessen rote learning, the government should consider proposing a policy for the development activity-based curriculum.
2. To prevent rote learning, it is suggested that the government create beneficial, condensed, and limited courses.
3. To stop rote learning, it is suggested that the government provide courses in a logical order.
4. It is suggested that the course maker use of the bloom taxonomy to make learning easier and less rote.
5. It is advised that teachers inspire and guide students to pursue quality education rather than merely degrees.
6. It is suggested that the government lessen the workload placed on instructors in order to do away with rote learning.
7. It is strongly advised that the government appoint capable and highly trained teachers to do away with rote learning.

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