



Do Teaching Methods Influence Academic Performance?

91. Mtapika

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Introduction:

The research project is about the “Do teaching methods influence academic performance in science subjects?. The study was conducted in Masasi Town which is found in Mtwara region. The research project was conducted after observing poor performance in science subjects such as Physics, Chemistry, Biology and Mathematics in our school Mtapika secondary school and the whole Masasi Town .Despite the fact that; there are much efforts which are taken by government through Town Director, but still performance in these science subjects has been decelerating day to day. The government in Masasi Town has managed to build laboratories, provide science books, and in recently consecutive two years, it has been taking students-teachers from University of Dar es Salaam to assist in teaching science subjects in expense of paying them wages to sustain living.



Method:

The target population in the study was all students from all secondary schools in Masasi Town. Masasi Town has ten{10} secondary schools ,but the sample of the study included form two students from Mtapika secondary school. The procedure applied in sampling was purposive sampling; is a technique in which the researcher selects samples based on a certain purpose. The researchers wanted the results obtained would be used in raising the science performance in their school.

The researchers collected data by using fifty (50) students of form two. These fifty students were divided into two classes of twenty five (25) students each. One class was known as ‘L’ class, and the other was known as ‘D’ class .Two facilitators (researchers themselves) were serving as teachers after being recruited by project supervising teacher. One facilitator entered the class ‘L ‘to teach “classes of levers” in the topic of “Simple Machines” in Physics for 40 minutes using lecture style method. The facilitator was oral presenting concerning three classes of levers by giving definition of lever, conditions used to classify these levers whereby a someone has to consider the locations of Efforts, Fulcrum and Load. The facilitator also tried to give examples of various levers. At end of the lesson the facilitator administered a test for 20 minutes then he marked and scored out of 10 marks.



Evance (a facilitator) presenting a lecture on 'Classes of Lever.'



Sarah (a facilitator) guiding students to discuss in groups

Results:

This part present data obtained and discuss the findings on the influence of teaching methods on academic performance of students in science subjects.

The test scores obtained for the students who were taught by lecture method are summarized in the frequency distribution table :

$$\begin{aligned} \text{Mean(average) of scores} &= \text{sum} \div \text{N}(\text{total students}) \\ &= 149 \div 25 \\ &= 5.96 \end{aligned}$$

Again, the following summarized Test scores in frequency distribution table were obtained for the students who were taught by group Discussion method:

$$\begin{aligned} \text{Mean(average) of scores} &= \text{sum} \div \text{N}(\text{total students}) \\ &= 190 \div 25 \\ &= 7.6 \end{aligned}$$

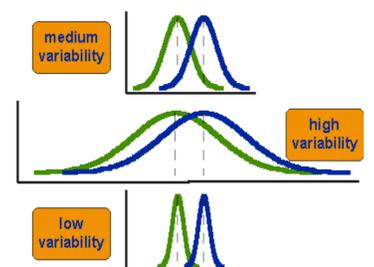
$$\begin{aligned} \text{The difference between average scores of two groups} &= 7.6 - 5.96 \\ &= 1.64. \end{aligned}$$

According to the table 2.1 only two (2) students scored 10 out of 10 after being taught using lecture method While four (4) students got 10 marks out 10 marks after being taught using group Discussion method. In the class’ L’ where students were taught by lecture method the last score was 2/10 While in the class ‘D’ where the students were taught by group Discussion the last score was 5/10.

The difference in average scores between these two groups was **1.64**. This shows that group Discussion method is better than lecture method, if were to measure score variability we would observed low variability in the test scores of the students who were taught by group Discussion, and high variability in the test scores obtained for the students who were taught by using lecture method.

Test scores(x)	Frequency(f)	fx
10	2	20
9	0	0
8	2	16
7	1	7
6	15	90
5	2	10
4	0	0
3	0	0
2	3	6
1	0	0
0	0	0
N=25		Sum=149

Test score(x)	Frequency(f)	fx
10	4	40
9	3	18
8	11	88
7	3	21
6	3	18
5	1	5
4	0	0
3	0	0
2	0	0
1	0	0
0	0	0
N=25		Sum=190



Conclusions

The objective of the study was to examine the effect of teaching methods on the students’ academic performance. The researchers reviewed related literature on the various things which influence students academic performance. Through the review of literature the limited research on this was revealed, and encouraged the researchers to carry out this research project in Masasi Town. Based on the findings of the study, the researchers concluded that group Discussion is better than lecture style for teaching science subjects .The study findings also emphasis that group discussion enable the student to keep memory and understand well. It makes a proof that spending more time in class on lecturing does not bring good results especially for secondary school students.The findings of this study will remind teachers to use group discussion guiding students and let them discuss.

References:

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