

# **Evaluation of the learning achievement levels of pupils in the 5<sup>th</sup> class in Primary School in Mathematics**

Mohammed Fdhle Ali Ahmed

Teacher in the Ministry of Education -Yemen

## **Abstract**

This Paper aims to know level of the pupils in the 5<sup>th</sup> class in Ali Mohammed Selah primary school in learning achievements of Mathematics and to know the differences which may happen in the pupils, learning according to their gender, and for achieving this object , this study has attempted to answer these questions:

- 1- What is the achievement of the 5<sup>th</sup> class pupils in learning of Mathematics?
- 2- Are there any statistical differences in the learning levels of pupils near to the indicative level of 0.05 due to the change in their gender?

The results of this study have revealed that the learning levels of pupils in general are over intermediate, especially 65% of them their learning is high while 35% their learning is low. More over the results have revealed the existence of differences in the out coming levels of pupils due to their gender, and it was for the bone fit of females, so this study has recommended to make the goals of the researches to know the causes of the poor levels of learning pupils in general and especially for males.

## **Importance of the study :**

- 1- Presenting some suggestions to rise level of teaching achievement of Mathematics in primary school.
- 2- Know the pupils levels achievement in learning Mathematics.
- 3- Presenting some suggestions and recommendation for developing teacher's performance by suggesting studies that determine the causes of declining the learning and then arrange them according to the pupil's opinion.

## **Problem of the study :**

Problem of the study is determined by trying to answer the following questions:

1. What is the level of the 5<sup>th</sup> class pupils in learning achievement of Mathematics?
2. Are there differences have statistical indication near the indicative level 0.05 in the pupils learning due to the change in their gender?

## **Aims of the study :**

The study aims to know the achievement level in learning of the 5<sup>th</sup> class pupils in Ali Mohammed Saleh Primary School in course of Mathematics and to know the differences which may rise in the achievement levels in learning of pupils according to the change in their gender , also aims to present some suggestions and recommendations in the light of the results which will the study reach to

## **Limits of the study :**

This study restricted to know the achievement (learning) in course of Mathematics for a specimen of pupils in the 5<sup>th</sup> class in Ali Mohammed Saleh Primary School in a second semester 2005-2006.

## **Terms of the study :**

### **\*Learning achievement:**

The researcher is defining the learning achievement as extent of the pupils comprehension to what they have learned of Mathematics in a second semester 2005-2006, and it is measured in a degree which the pupils (specimen of the study) have obtained on it , because of their correct answers on the question of the achievement test which prepared for this purpose.

## Previous studies

### 1- study of Shokri Ahmed ( 1415 A.H)

This study aims to know causes of declining of the pupils achievement in Mathematics from their point of view .

And this study revealed that causes of declining of achievement of Mathematics represent a compound phenomenon ,which participates in causing it ,a complex compound of factors related to the directions of pupils and anxiety, forms of personal preference and other psychological and acquaintance factors.

#### **Recommendation of this study :**

The teacher's confirmation for his pupils the importance of Mathematics until they recognize its importance very well ,particularly in the primary classes, and the need for other studies to make deep study in this subject

### 2- Study of Abdul- Azeez AlRwees (1423 A.H )

Its title the prediction of Mathematical achievement of the 8<sup>th</sup> class pupils in S.A ,throw the mathematical innovation and the trend towards learning the maths. and the pupils marks in maths. this study concentrated on the relationship between achievement of the pupils in maths. and the following three factors.

- 1- The creative of the Mathematics.
- 2- Trends of pupils towards learning the maths.
- 3- The pupils marks in maths.

The study has reached to that the learning achievement levels are very low, also the result of analytic descend revealed on a direct connective relations between the learning achievement for Mathematics and the previous factors .

### 3- Study of Abo-Zaenah(1985 A.C)

This study aims to know the extent of the 3<sup>rd</sup> and the 6<sup>th</sup> primary classes pupils have gained for the basic skills which are included in the curriculum, on a specimen of pupils about 3882 pupils from the 3<sup>rd</sup> class pupils and 1990 from the 6<sup>th</sup> class pupils.

This study has reached to that there is an advance in the learning achievement ,whereas the percentage of performance of the 6<sup>th</sup> class pupils reached to 58% and the 3<sup>rd</sup> class pupils 32% ,and the performance of males in the 3<sup>rd</sup> class was higher than females and has statistical indication while the performance was closer in the 6<sup>th</sup> class.

### 4- Study of Alfarhan , Lateefah and AlKhwaldah (1985)

This study aims to know achievement of pupils in the obligatory stage in Jordan for many subjects. Mathematics was one of them, the researchers used achievement tests on a specimen 876 of pupils whom had been chosen from Arbadetooz Aoon-Town schools, on the classes from the 4<sup>th</sup> ( primary) to the 1<sup>st</sup> (elementary) ,the study has reached to results showed the clear declining in achievement statistical indication between males and females in the achievement and it was for a benefit of males .

#### Discussion of the previous studies:

From the previous studies it can be concluded the following :

There is a weakness in achievement of pupils in Mathematics in the learning stages and classes which have been studied previously (abu-zaenah1985, Alfarhan and his colleagues 1985, Alrwees 1423AH and ShuKre 1415AH).

The major factors which cause the weakness in Mathematics are:

The anxiety , the fear of maths, the negative attitudes towards the maths, the personal preference, the crowded classes and the anxiety during tests also not paying attention to weaker pupils , not linking between what is studying and the real life, not answering the examples or having enough exercises and the aim of learning maths is not clear for the learner .(ShuKri 1415, Alrwees 1423)

The other studies which dealt with a variable in gender ,reached to that there differences in achievement for the benefit of males as it is in my study ( Abu-zaenah 1985, Alfarhan 1985).

**Procedures of the study : Specimen of the study :**

Number of pupils in the 5<sup>th</sup> class in Ali Mohammed Saleh primary school were 100 male and female pupils ,and they were distributed to two classes and they were nearly similar in number considering the gender .

They have been taken all as specimen for the study so the specimen was 50 male pupils and 50 female pupils.

**Toll of the study**

The study depended in collecting the information from the pupils (the specimen of the study) on the achievement test prepared by the researcher ,the test was consisted of 30 of multiple choice questions

**Validity of the tool :**

The tool of study had been introduced to a group of teaching staff in department of Mathematics curricula in faculty of Education – Dhalaa University of Aden ,so that 10 questions were omitted out of 30 questions and 20 questions were selected.

**Stability of the tool :**

The test had been examined on specimen from the society then it had been applied again on the same specimen and in a same circumstance of the first application ,then the results were collected and compared by Pearson's Coefficient which reached 0.82 and after correcting it by Spearman Prowns Coefficient reached 1.89 and it was a good coefficient.

**Presentation and Interpretation of the results :**

The results will be presented and interpreted on light of the questions and the hypothesis of the study as follow:

**Presenting and interpreting results of the firs question:**

What is the achievement level of the 5<sup>th</sup> class pupils in Mathematics?

To answer this question (the frequency ,the percentage, and the average have been calculated for the whole grades as in table no1

| Groups | Groups centre | Frequency | Centre <<br>Frequency> | % |
|--------|---------------|-----------|------------------------|---|
| 22-20  | 21            | 0         | 0                      | 0 |
| 19-17  | 18            | 35        |                        |   |
| 16-14  | 15            |           |                        |   |
| 13-11  | 12            |           |                        |   |
| 10-8   | 9             |           |                        |   |
| 7-5    | 6             |           |                        |   |
| Total  |               |           |                        |   |

**Table no.1**

By looking at the results in table no.1 ,it shows that 35% of the pupils had got grades between (17-19) and they are high grades indicate on a high achievement level ,whereas the second group of the pupils their grades between (14-16) and they represent 30% of the pupils and their grades indicate on a high achievement level too ,whereas 19% of the pupils had got grades between (11-13) and they represent achievement level above the average, whereas the rest percentage of the pupils which are about 16%, their grades were between (8-10) and they are a very grades indicate to low achievement level for this percentage of pupils .

On light of the results the researcher would like to show that it is in spite of the pupils who had a high grades indicate to high achievement level they represent 65% of the pupils and 19% their achievement is medium ,so that 16% of the pupils their achievement is low and this is a dangerous indication we have to stand in front of it to reveal its causes , particularly the Government ,to make all efforts to develop the teachers achievement level by holding more sessions for teachers like those which were held in the last 5 years , and they reach more than 12 sessions.

### **Presenting and interpreting results of the second question**

Are there any difference in achievement the 5<sup>th</sup> class pupils in Mathematics due to variation in gender? The researcher put a zero hypothesis to answer the second question it says : there are no differences have a statistical indicator near the indication level (0.05) between achievement of the 5<sup>th</sup> class pupils in Mathematics due to the variation in gender.

And to check reality of this hypothesis ,the T-tests for the independent samples had been calculated ,the results were shown in Table no.2 below

| Results of the T-tests for the independent equal samples | Male     | Female   |
|--|----------|----------|
| Mean   | 13.92    | 15.52    |
| Variance   | 8.809796 | 10.94857 |
| Observations   | 50       | 50       |
| Hypothesized mean difference                             | 0        |          |
| Degree free  | 98       |          |
| T-stat   | -2.54524 |          |
| T-critical two –tail                                     | 1.984467 |          |

By looking to the results in table no.2 ,it shows that the calculated T-stat at the free degree 98 and an indication level 0.05 reached (-2.54) ,whereas the tabulate T-stat (critical 2-tail) reached 1.98 at the indication levels and the 2-free degree mentioned above , this result indicates to exist differences in grades of the pupils attributed to variation in gender (male/female) for females benefits (the greatest mean) .

In front of this result the researcher would like to indicate to that the females motive for learning and interesting in learning is better than males . This result is not bad but the teachers ,school administration and the pupils parents have to rise the motivation of male-pupils for learning and to improve their teaching situation to get ride of the variation between males and females in their achievement .

### **Conclusion**

Major results which the study reached to ,are :

- 1- Noticeable improvement in levels of the pupils achievement , comparing with the low levels which were shown by the previous study ,where the Mean –for marks of pupils - reached 14.4 and the total marks is 20 .
- 2- Existing differences in the pupils achievement rate and was benefit of the female -pupils .

### **Recommendations**

- 1- Interest in the application sides of Mathematics and concentrate on concrete information ,and work to activate Mathematical application in schools.
- 2- Assurance the concrete means for Mathematics and employ the teaching techniques to produce them.
- 3- Concentrate on the pupils activities which accompying (relating) the subject ,to yearn Mathematics for pupils ,and show the active sides and light pictures of Mathematics .
- 4- Look after Mathematics teacher in primary classes and in all levels and select the specialist teacher .
- 5- Using modern ,renewed and varied methods and don't concentrate on using one method only.
- 6- Performing achievement competition between classes and also between schools, to encourage the competition soul of the pupils

### **References :**

- 1- Shkri Ahmed Causes of low achievement of pupils in Mathematics Thesis of the Arabian Gulf –issue no. 52 -1415 A.H
- 2- Abdul-Azeez AlRowees Prediction of Mathematical achievement of pupils, educational Documentation Magazine issue no.47-1423A.H.