

ABSTRACT

" Relationship Between Computational Performance and Number Sense Among Ninth - Grade Students in Bethlehem Area . "

The purpose of the study is to investigate and explore the relationship between the performance on Number Sense Test (NST) and the performance on Written Computation Test (WCT) among ninth - grade students in Bethlehem area for the academic year 1998/1999.

In addition , it attempts to show the effect of gender and school achievement in math's on students scores in NST and WCT .

In concrete terms the study aims to answer the following research questions :

1. Is there a relationship between the performance on NST and the performance on WCT among ninth - grade students ?
2. Is there a relationship between the performance on NST and the performance on WCT among ninth - grade male ?
3. Is there a relationship between the performance on NST and the performance on WCT among ninth - grade female ?
4. Is there statistically significant difference between the performance on NST and the performance on WCT among ninth - grade students ?
5. Is there statistically significant difference in the students performance on NST between male and female ?
6. Is there statistically significant difference in the students performance on WCT between male and female ?
7. Is there statistically significant difference between the performance on NST and the performance on WCT among the students whose grades of Mathematics in school ranging between 80% to 100%?

The population of the study consists of all the ninth grade students in Bethlehem area (2317). The sample of the study constitutes (257) students , 126 male and 131 female .

Data were collected with separate tests on WCT and NST , tests were translated into Arabic and then were validated by a panel of experts .

Test - retest reliability estimates for The WCT and NST , ranged from 0.744 to 0.918 on each instrument.

The WCT and NST were given on consecutive weeks in December in the end of the first semester for the academic year 1998/1999 .

The data were processed and the following results were found :

1. There is a positive relationship at level ($0.05 = \alpha$) between the performance on NST and the performance on WCT among ninth - grade students .
2. There is a positive relationship at level ($0.05 = \alpha$) between the performance on NST and the performance on WCT among ninth - grade male .
3. There is a positive relationship at level ($0.05 = \alpha$) between the performance on NST and the performance on WCT among ninth - grade females .
4. There is a significant differences at level ($0.05 = \alpha$) between the performance on NST and the performance on WCT among ninth - grade students .
5. There is a significant gender difference at level ($0.05 = \alpha$) on the performance of NST .
6. There is no a significant gender difference at level ($0.05 = \alpha$) on the performance of WCT .
7. There is a significant difference at level ($0.05 = \alpha$) between the performance on NST and the performance on WCT among students whose grades of Mathematics in school ranging between 80% to 100%

In light of those findings , It is recommended that number sense should be developed among students . Thus , more studies concerning this issue should be carried out

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