

ABSTRACT

Estimation is a useful skill, not just in Mathematics but in everyday life situations. Students must be taught to question the reasonableness of their answers in all areas of mathematics. This will then be used outside the classroom to identify errors and to give reasonable estimates in everyday life situations.

The major findings are given below:

1. Students are not equipped with estimation skills which would help them to question the reasonableness of their answers.
2. Students do not fully understand what an estimate is and why it is necessary to find one.
3. The only strategy students admitted using is 'rounding-off'.
4. Students lack appreciation for the size of decimal and common fractions.
5. The girls in grades 7 and 8 performed better than the boys on the worksheet but the boys in grade 9 performed better than the girls.

The Data analysis gave rise to the following recommendations:

1. Students should be exposed to a variety of estimation strategies.

2. Students should be encouraged to use estimation strategies to aid them in their calculations, i.e. estimation should precede calculation.
3. Students should be encouraged to question the reasonableness of their responses.
4. An appreciation of common and decimal fractions is useful, therefore students need to understand the size of fractions.
5. Students must be encouraged to find out the task they are being asked to perform before plunging into calculation.
6. Students must be taught to appreciate differences in units when necessary.
7. Students must be equipped with the correct procedure for rounding-off.