

Title Misconceptions in Acid-Base of Upper Secondary School level
Students in Changwat Nakhon Si Thammarat
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Abstract

The purposes of this research were : 1) to determine misconceptions in acid-base topic of Mathayomsuksa VI students in Changwat Nakhon Si Thammarat ; 2) to compare misconceptions in acid-base topic of students by genders ; 3) to compare misconceptions in acid-base topic of students in different schools sizes.

The samples of this research were 344 Mathayomsuksa VI students in Changwat Nakhon Si Thammarat in the first semester of acedemic year 1997. The samples were randomly selected by muti-stage random sampling. The instrument employed in this research was a 35-item, two-tier multiple-choice test of selected concepts in acid-base topic. The data was statistically analyzed by using percentage, mean, standard deviation, t-test , F-test (one - way analysis of variance : ANOVA) and the Scheffe method of multiple comparision.

The findings of this research were as follows :

1. There were high misconceptions of students in acid-base topic by over 50% of the students held misconceptions in all the selected concepts.
2. There was a significant difference at the .01 level in misconceptions between genders ; male students had more misconceptions than female students.
3. There was significant difference at the .01 level in misconceptions in different school sizes ; students in medium schools and the large schools had more misconceptions than those in the extra-large schools.