**ABSTRAK**

**HaryuniHelmi, 2014. PERBANDINGAN KEMAMPUAN PENALARAN MATEMATIS SISWA KELAS X AVIONIC SMK PENERBANGAN HASANUDDIN MAKASSAR DALAM PEMBELAJARAN MATEMATIKA DENGAN STRATEGI REACT DAN STRATEGI KONVENSIONAL DALAM MEMECAHKAN MASALAH BERKAITAN DENGAN MATRIKS.** Skripsi. Jurusan Matematika Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Negeri Makassar.

Metode yang digunakandalampenelitianiniadalahmetodeeksperimendenganunit experimendalampenelitianiniadalahsiswa SMK PenerbanganHasanuddinkelas X sebanyakduakelas, yang terdiriataskelaseksperimendankelaskontrol. Keduakelastersebutdiambilsecaraacakdaritigakelas yang ada.Kelaseksperimen yang berjumlah 37 siswamerupakankelas yang mendapatkanpembelajarandenganstrategi*react*sedangkankelaskontrol yang berjumlah 37 siswaadalahkelas yang mendapatkanpembelajarandenganstrategikonvensional. Dalampenelitianiniperlakuan yang diberikanadalahpembelajaranmelaluistrategi*react*, sedangkanaspek yang diukurnyaadalahpenalaranmatematissiswa. Olehkarenaitu, yang menjadivariabelbebasdalampenelitianiniadalahpembelajarandenganstrategi*react*danvariabelterikatnyaadalahpenalaranmatematis.

Hasilpretesmenunjukkanbahwanilaitertinggidanterendahdarikelaseksperimenadalah 14 dan 8, sedangkanpadakelaskontrolnilaitertinggidannilaiterendahnyaadalah14 dan 6.Kelaseksperimenmemilikinilairata-rata 10,05dankelaskontrol 10,08,haltersebutmenunjukkanbahwakelastersebutmemilikivariansi yang homogensehinggamemenuhiuntukdijadikansebagaiobyekpenelitian. Hasilpostesmenunjukkanbahwanilaitertinggidanterendah yang dicapaiolehsiswapadakelaseksperimenadalah 92 dan 58 dengan rata-rata 72,41 sedangkanuntukkelaskontroladalah 85 dan 28 denganrata-rata 63,27.

Skor rata-rata nilai gain kelaseksperimenadalah 0.7. Hal inimenunjukkanbahwakualitaspencapaianbernalarsiswabaik, danskor rata-rata nilai gain kelaskontroladalah 0,6. Hal inimenunjukkanbahwakualitaspencapaianbernalarsiswasedang.

Uji-t yang dilakukanterhadaphasil gain kelaskontroldankelaseksperimenmenunjukkanadanyaperbedaanhasil yang signifikanantarakelaseksperimendankelaskontrol.Karenanilai ½ sig. (2-tailed) <dari 0,05maka Ho di terima, artinyapencapaiankemampuanbernalarmatematissiswakelaseksperimenlebihbaikdaripadakelaskontrolSehinggadapatdisimpulkanbahwaterjadiperbedaankemampuanpenalaranmatematissiswaantarakelaseksperimendankelaskontrol.

Kata kunci: strategi*React*, kemampuanpenalaran

**ABSTRACT**

**COMPARISON OF MATHEMATICAL REASONING ABILITY SECOND CLASS OF AVIONICS SMK PENERBANGAN HASANUDDIN MAKASSAR IN LEARNING MATHEMATICS REACT STRATEGY AND CONVENTIONAL STRATEGY IN THE MATTER RELATING TO SOLVE THE MATRIX.**Thesis. Educational Studies Program Mathematics Department of Mathematics, Faculty of Mathematics and Natural Sciences, State University of Makassar.

The method used in this study is the experimental method with the experimental unit in this study is SMK PenerbanganHasanuddin Makassar students of class X as much as two classes, consisting of experimental class and control class. Both of these classes are taken at random from the three existing classes. Experimental class students using REACT strategy while the control classes students are using conventional strategy. This type of research is experimental, whereas aspects are measured students' mathematical reasoning. Therefore, the independent variable in this study is a learning strategy with react strategy and dependent variable is mathematical reasoning.

Pretest results showed that the highest and lowest values ​​of the experimental class are 14 and 8, while for the control class and the highest value and the lowest value is 14 and 6, experimental classes have an average value is 10.05 and the control classes have an average value is 10.08, it shows that the class has a homogeneous variance that qualifies to serve as the object of study. Post-test results showed that the highest and lowest scores achieved by students in the experimental class was 92 and 58 with an average of 72.41 while the control class is 85 and 28 with an average of 63.27.

The average score of the experimental class gain value is 0.7. This indicates that the quality of students' achievement of good reasoning, and the average score of the class gain control value is 0.6. This indicates that the quality of student achievement at intermediate levels

T-test was conducted on the results of the gain control class and experimental class showed a significant difference in outcome between the experimental class and the control class. Because the value of ½ sig. (2-tailed) <0.05 then Ho is accepted, it means the achievement of students 'mathematical reasoning abilities experimental classes are better than the control class It can be concluded that there is a difference in students' mathematical reasoning ability between the experimental class and the control class.

Keywords: Reactstrategy, reasoning ability