ABSTRAK

JUNANSHE NANDO SINAGA. NIM : 8176182023. Pengaruh Model Pembelajaran Inkuiri Terbimbing dan Model Pembelajaran *Discovery* Terhadap Keterampilan Proses Sains dan Kemampuan Berpikir Kritis Materi Cahaya dan Sifat-Sifatnya Siswa Kelas IV SDN 094099 Siruberube. Tesis. Pendidikan Dasar. Program Pascasarjana Universitas Negeri Medan. 2021.

Tujuan penelitian ini untuk mengetahui perbedaan keterampilan proses sains menggunakan model pembelajaran inkuiri terbimbing dengan model *discovery,* perbedaan kemampuan berpikir kritis siswa menggunakan model pembelajaran inkuiri terbimbing dengan model *discovery,* interaksi antara model pembelajaran dan kemampuan awal siswa dalam mempengaruhi keterampilan proses sains siswa, dan interaksi antara model pembelajaran dan kemampuan awal siswa dalam mempengaruhi kemampuan berpikir kritis siswa. Populasi penelitian ini seluruh siswa kelas IV SD Negeri 094099 Siruberube yang terdiri dari 2 kelas. Instrumen mengukur keterampilan prosess sains dan kemampuan berpikir kritis digunakan tes essay. Teknik analisis data menggunakan ANAVA. Hasil penelitian yaitu Terdapat perbedaan keterampilan proses sains siswa menggunakan model pembelajaran ingkuiri terbimbing dengan model *discovery*. Keterampilan proses sains siswa menggunakan model inkuiri terbimbing nilai rata-rata 73,04, sedangkan menggunakan model pembelajaran discovery nilai rata-rata 60,67. Terdapat perbedaan kemampuan berpikir kritis siswa menggunakan model pembelajaran inkuiri terbimbing dengan model *discovery*. Kemampuan berpikir kritis siswa menggunakan model pembelajaran inkuiri terbimbing nilai rata-rata 70,96, sedangkan menggunakan model *discovery* nilai rata-rata 60,82. Terdapat interaksi antara model pembelajaran dan kemampuan awal terhadap keterampilan proses sains siswa. Hasil uji ANAVA nilai sig=0,036<sig.0,05, sehingga terjadinya interaksi. Terdapat interaksi antara model pembelajaran dan kemampuan awal terhadap kemampuan berpikir kritis siswa. Hasil uji ANAVA diperoleh nilai sig=0,038<sig.0,05, sehingga membuktikan terjadinya interaksi.

Kata Kunci: *Model inkuiri Terbimbing, Discovery, Keterampilan Proses Sains, dan Kemampuan Berpikir Kritis*

ABSTRACT

JUNANSHE NANDO SINAGA. NIM: 8176182023. The Influence of Guided Inquiry Learning Model and Discovery Learning Model on Science Process Skills and Critical Thinking Ability in Light Matter and Its Properties for Class IV Students of SDN 094099 Siruberube. Magister's Degree Programs Pascasarjana State University of Medan, 2021.

The purpose of this study was to determine differences in science process skills using guided inquiry learning models with discovery models, differences in students' critical thinking abilities using guided inquiry learning models with discovery models, interactions between learning models and students' initial abilities in influencing students' science process skills, and interactions between learning models and students 'initial abilities in influencing students' critical thinking skills. The study population was all fourth grade students of SD Negeri 094099 Siruberube which consisted of 2 classes. The instrument to measure science process skills and critical thinking skills was used essay tests. The data analysis technique used ANAVA. The result of this research is that there are differences in students' science process skills using guided ingkuiri learning models with discovery models. The students' science process skills used the guided inquiry model with an average value of 73.04, while using the discovery learning model the average value was 60.67. There are differences in students' critical thinking abilities using guided inquiry learning models with discovery models. The students' critical thinking skills used the guided inquiry learning model with an average value of 70.96, while using the discovery model the average value was 60.82. There is an interaction between the learning model and the initial ability of students' science process skills. The ANOVA test results, the value of sig = 0.036 <sig.0.05, so that the interaction occurs. There is an interaction between the learning model and the initial ability of students' critical thinking skills. The ANOVA test results obtained sig = 0.038 <sig.0.05, thus proving the interaction.

Keywords: *Guided Inquiry Model, Discovery, Science Process Skills, and Critical Thinking Ability*