### ABSTRAK

## PENGARUH MODEL PEMBELAJARAN SCIENTIFIC INQUIRY DAN COMMUNICATION SKILLS TERHADAP KETERAMPILAN PROSES SAINS MAHASISWA

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Abstrak. Penelitian bertujuan untuk mengetahui (1) penerapan model pembelajaran *scientific inquiry* terhadap keterampilan proses sains mahasiswa, (2) pengaruh communication skills tinggi dan communication skills rendah terhadap keterampilan proses sains mahasiswa, (3) interaksi model pembelajaran scientific inquiry dan communication skills terhadap keterampilan proses sains mahasiswa. Penelitian yang dilakukan secara quasi eksperiment ini dilakukan pada mahasiswa jurusan biologi pada mata kuliah fisika dasar UIN-SU. Sebagai populasi terpilih dua kelas secara *cluster random sampling*. Instrumen yang digunakan adalah tes uraian berbasis keterampilan proses sains yang telah divalidasi oleh dua orang ahli. Data yang dihasilkan dianalisis menggunakan ANAVA dua jalur. Hasil penelitian menunjukkan bahwa : (1) keterampilan proses sains mahasiswa menggunakan model pembelajaran scientific inquiry lebih baik daripada pembelajaran konvensional, (2) keterampilan proses sains mahasiswa yang memiliki communication skills tinggi lebih baik daripada mahasiswa dengan communication skills rendah, (3) terdapat interaksi model pembelajaran scientific inquiry dan communication skills terhadap keteampilan proses sains, dimana interaksi pada kelompok mahasiswa dengan communication skills tinggi lebih baik daripada mahasiswa dengan *communication skills* rendah.

Kata Kunci: scientific inquiry, communication skills, keterampilan proses sains



### ABSTRACT

# THE EFFECT OF SCIENTIFIC INQUIRY LEARNING MODEL AND COMMUNICATION SKILLS TOWARD SCIENCE PROCESS SKILLS

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Abstract. This study aims to determine (1) the application of the scientific inquiry learning model to students science process skills, (2) the effect of high communication skills and low communication skills on students' science process skills, (3) the interaction of scientific inquiry learning models and communication skills to process skills student science. This quasi-experimental study was conducted on biology students in the basic physics course at UIN-SU as a population and two classes were selected by cluster random sampling. The instrument used was a science process skill based description test that had been validated by two experts. The resulting data was analyzed using two-way ANAVA. The results of this study indicate: (1) science process skills of students using the scientific inquiry learning model are better than conventional learning, (2) science process skills of students who have high communication skills are better than students with low communication skills, (3) there is model interaction scientific inquiry learning and communication skills towards science process skills, where interactions in groups of students with high communication skills are better than those with low communication skills.

Keywords: scientific inquiry, communication skills, science process skills

