PEMBELAJARAN STEM UNTUK MENGIDENTIFIKASI PROFIL *ENGINEERING SKILL* DAN MINAT SAINS SISWA SEKOLAH DASAR PADA MATERI PANAS DAN PERPINDAHANNYA

TESIS

Diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar
Magister Pendidikan Program Studi Pendidikan Dasar

oleh :

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PROGRAM STUDI PENDIDIKAN DASAR

SEKOLAH PASCASARJANA

UNIVERSITAS PENDIDIKAN INDONESIA

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PEMBELAJARAN STEM UNTUK MENGIDENTIFIKASI PROFIL *ENGINEERING SKILL* DAN MINAT SAINS SISWA SEKOLAH DASAR PADA MATERI PANAS DAN PERPINDAHANNYA

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(Penelitian Kualitatif Deskriptif di SD Negeri 1 Tangkil Kabupaten Cirebon)

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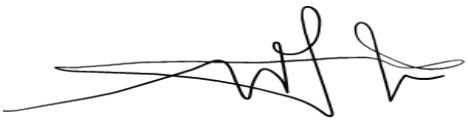

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SURAT PERNYATAAN
KEASLIAN TESIS

Dengan ini saya menyatakan bahwa Tesis yang berjudul

PEMBELAJARAN STEM UNTUK MENGIDENTIFIKASI PROFIL *ENGGINEERING SKILL* DAN MINAT SAINS SISWA SEKOLAH DASAR PADA MATERI PANAS DAN PERPINDAHANNYA

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ABSTRAK

Penelitian ini bertujuan untuk memperoleh gambaran tentang profil *enginering skill* siswa Sekolah Dasar, untuk mengetahui profil minat sains siswa Sekolah Dasar melalui pembelajaran STEM, serta untuk melihat perbandingan *engineering skill* dan minat sains siswa diantara siswa laki-laki dan siswa perempuan melalui pembelajaran STEM pada materi panas dan perpindahannya. Untuk memperoleh gambaran tersebut, maka digunakan pendeketan kualitatif deskriptif. Partisipan penelitian ini terdiri dari 33 siswa di salah satu Sekolah Dasar yang ada di Kabupaten Cirebon. Teknik pengumpulan data meliputi rubrik *engineering skill* dan angket minat sains. Hasil penelitian menunjukkan bahwa: pembelajaran STEM dapat memunculkan *engineering skill*. Profil *engineering skill* siswa dari tiap tahapan proses *engineering* berada pada kategori baik, melalui pembelajaran STEM dapat memunculkan *engineering skill* siswa yang terlatih dalam menyelesaikan tantangan *engineering*; pembelajaran STEM dapat memunculkan minat sains siswa dalam beajar sains, minat sains siswa berada pada kategori baik; *engineering skill* pada pembelajaran STEM mempunyai kemampuan yang sama antara siswa laki-laki dan siswa perempuan. Pembelajaran STEM dapat memunculkan minat sains siswa Sekolah Dasar. Siswa laki-laki mempunyai minat sains lebih tinggi dibandingkan siswa perempuan.

Kata Kunci: *engineering skill*, minat sains, pembelajaran STEM, materi panas.

STEM LEARNING TO IDENTIFY ENGINEERING SKILLS AND SCIENCE INTEREST PROFILE OF ELEMENTARY SCHOOLS STUDENTS OF HEAT AND TRANSFER

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ABSTRAK

This study aims to obtain an overview engineering skill profile of elementary school student, to know interest in science profile of elementary school student through STEM learning, and to know the comparison of engineering skill and interest in science of male student and female student through STEM learning on the heat material and it's transfer. To obtain this description, a descriptive qualitative approach. Participants were 33 students in one of prymary school in Cirebon Regency. Data collection techniques include engineering skill rubric and science interest questionnaires. The result showed that: STEM learning can bring up engineering skills . The engineering skill profil of students from each stage of the engineering process is in the good category, through STEM learning, it can bring out the engineering skills of the students who are trained in solving engineering challenges ; STEM learning can generate students' interest in science, students' interest in science is in a good category; both male and female students have same engineering skills in STEM learning, STEM learning can generate interest in science elementary school student, and male students' science-interest is higher than the females students.

Keywords: engineering skill, interest in science, STEM learning, material heat and transferred.

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