PENINGKATAN KEMAMPUAN KOMUNIKASI MATEMATIS DAN PERUBAHAN *SELF-EFFICACY* PESERTA DIDIK SMA DENGAN MODEL PEMBELAJARAN *THINK-PAIR-SHARE* (TPS) MENGGUNAKAN METODE FEYNMAN

SKRIPSI

diajukan sebagai untuk memenuhi sebagian syarat untuk memperoleh gelar
Sarjana Pendidikan Matematika

Oleh

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PROGRAM STUDI PENDIDIKAN MATEMATIKA

FAKULTAS PENDIDIKAN MATEMATIKA DAN ILMU PENGETAHUAN ALAM

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ABSTRAK

Theodore Dwivaland Fophin (2100448). Peningkatan Kemampuan Komunikasi Matematis dan Pengaruh *Self-Efficacy* Peserta Didik SMA dengan Model Pembelajaran *Think-Pair-Share* (TPS) Menggunakan Metode Feynman.

Kemampuan komunikasi matematis merupakan salah satu kemampuan yang diperlukan masyarakat dengan *self-efficacy* menjadi salah satu faktornya. Sayangnya penelitian-penelitian mengindikasikan kemampuan komunikasi matematis dan *self-efficacy* peserta didik masih belum baik sehingga diperlukan upaya untuk meningkatkannya salah satunya model pembelajaran *Think-Pair-Share* (TPS). Penelitian ini ingin melihat pengaruh yang ditimbulkan metode pembelajaran Feynman pada model pembelajaran TPS terhadap kemampuan komunikasi matematis dan *self-efficacy* peserta didik. Penelitian ini merupakan penelitian kuasi eksperimen dengan desain *non-equivalent control group* dan dilengkapi wawancara. Instrumen yang digunakan berupa tes kemampuan komunikasi matematis dan angket *self-efficacy*. Hasil penelitian ini adalah: 1) Peningkatan kemampuan komunikasi matematis yang memperoleh pembelajaran TPS menggunakan metode Feynman tidak lebih tinggi secara signifikan daripada peserta didik yang memperoleh pembelajaran TPS; 2) Tidak terdapat perbedaan perubahan *self-efficacy* yang signifikan antara peserta didik yang memperoleh pembelajaran TPS menggunakan metode Feynman dengan peserta didik yang memperoleh pembelajaran TPS; 3) Peserta didik dengan peningkatan kemampuan komunikasi matematis tinggi cenderung belajar mandiri dan menguasai materi prasyarat, sementara peserta didik dengan peningkatan sedang menyukai penjelasan guru dan kelompok yang suportif, dan peserta didik dengan peningkatan rendah ketergantungan pada penjelasan guru, kesulitan dalam konsep dasar, dan tertekan saat evaluasi. Dengan demikian, penggunaan pembelajaran TPS menggunakan metode Feynman dalam meningkatkan kemampuan komunikasi matematis dan mengubah *self-efficacy* peserta didik haruslah selektif.

Kata kunci: *Think-Pair-Share* (TPS), Pembelajaran Feynman, Kemampuan Komunikasi Matematis, *Self-Efficacy*

ABSTRACT

Theodore Dwivaland Fophin (2100448). ***Improving Mathematical Communication Skills and the Influence of Self-Efficacy among Senior High School Students through Think-Pair-Share (TPS) Learning Model Using the Feynman Method.***

This study analyzed the effects resulted from pairing Feynman learning method with Think-Pair-Share (TPS) learning model towards improving students' mathematical communication ability and altering their self-efficacy. Mathematical communication skills is an important skill for current society with self-efficacy being one of its factors. Unfortunately, research indicated that students still lack in mathematical communication ability and self-efficacy. The research employed quasi-experimental method with a non-equivalent control group design, supplemented by interviews. The instruments used were a mathematical communication skills test and a self-efficacy questionnaire. The results of this study are: 1) The improvement in mathematical communication skills of students who received TPS learning with the Feynman technique was not significantly higher than that of students who received TPS learning only; 2) There was no significant difference in self-efficacy alteration between students who received TPS learning with the Feynman technique and those who received TPS learning only; 3) Students with high improvement in mathematical communication skills tend to learn independently and have mastered prerequisite materials. In contrast, students with moderate improvement prefer teacher explanations and supportive group work, while students with low improvement show dependence on teacher explanations, struggle with basic concepts, and feel pressured during evaluations. Therefore, the usage of TPS learning model using the Feynman method to improve students' mathematical communication skills and alter self-efficacy should be done selectively.

Keywords: Think-Pair-Share (TPS), Feynman learning, Mathematical Communication Skills, Self-Efficacy.

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