ABSTRAK

Salsabila Nur Novianti, 1212050156, 2026, "Analisis *Tehcnological Pedagogical and Content Knowledge* (TPACK) Dalam Pendekatan *Deep Learning* Pada Calon Guru Matematika"

Technological Pedagogical and Content Knowledge (TPACK) dalam pembelajaran matematika menjadi salah satu aspek penting dalam mempersiapkan calon guru untuk mengintegrasikan teknologi, pedagogi, dan materi matematika. Integrasi TPACK dapat mendukung penerapan pendekatan *deep learning* yang menekankan pembelajaran *mindfull, meaningfull,* dan *joyfull.* Penelitian ini bertujuan untuk menganalisis TPACK dalam pendekatan *deep learning* pada calon guru matematika. Penelitian ini menggunakan pendekatan kualitatif. Subjek penelitian terdiri atas tiga orang calon guru matematika Data diperoleh melalui observasi, wawancara, dan angket terbuka, yang kemudian dianalisis melalui reduksi data, penyajian data, dan pernarikan kesimpulan. Hasil penelitian menunjukkan bahwa ketiga calon guru telah memperoleh komponen TPACK dalam pembelajaran dengan memanfaatkan teknologi untuk mendukung penyampaian materi, aktivitas pembelajaran, dan asesmen. Penerapan pendekatan *deep learning* terlihat melalui keterlibatan aktif peserta didik, kegiatan yang menghubungkan materi dengan konteks pembelajaran, serta kegiatan refleksi. Namun, integrasi teknologi masih memiliki perbedaan pada setiap calon guru, terutama dalam menentukan kesesuaian teknologi dengan materi dan strategi pembelajaran.

Kata kunci: *Technologigal Pedagogical and Content Knowledge* (TPACK), *Deep Learning*, Calon Guru Matematika, Pembelajaran Matematika.

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ABSTRACT

Salsabila Nur Novianti, 1212050156, 2026, *"Analysis of Technological Pedagogical and Content Knowledge (TPACK) within the Deep Learning Approach among Prospective Mathematics Teachers"*

Technological Pedagogical and Content Knowledge (TPACK) *in mathematics learning is an important aspect in preparing prospective teachers to integrate technology, pedagogy, and mathematical content.* The integration of TPACK *can support the of the implementation Deep Learning approach, which emphasizes mindful, meaningful, and joyful learning. This study aims to analyze the implementation of* TPACK *within a Deep Learning approach among prospective mathematics teachers. This study employed a qualitative approach. The research subjects consisted of three prospective mathematics teachers. Data were collected through observations, interviews, and open-ended questionnaires, and were analyzed through data reduction, data display, and conclusion drawing. The results showed that all three prospective teachers demonstrated the* TPACK *components in their teaching by utilizing technology to support content delivery, learning activities, and assessment. The implementation of the Deep Learning approach was reflected in students' active engagement, learning activities that connected the material to the learning contexts, and reflection activities. However, the integration of technology varied among the prospective teachers, particularly in determining the suitability of technology for the mathematical content and learning strategies.*

Keywords: *Technological Pedagogical and Content Knowledge* (TPACK), *Deep Learning, Prospective Mathematics Teachers, Mathematics Learning.*

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