

## ABSTRAK

**Nurfajri Handayani. NIM. 8176173006.** *Analisis Kemampuan Technological Pedagogical Content Knowledge (TPACK) pada Guru Biologi SMA yang Mengajar di Kelas XI Tahun Pembelajaran 2019/2020. Tesis, Program Studi Magister Pendidikan Biologi. Pascasarjana Universitas Negeri Medan. 2020.*

Penelitian ini bertujuan untuk mengetahui kemampuan *Technological Pedagogical Content Knowledge* (TPACK) guru biologi di Kota Medan. Populasi dalam penelitian ini guru biologi yang mengajar di kelas XI tahun pembelajaran 2019/2020. Sampel dalam penelitian ini berjumlah 50 guru dari 14 Sekolah. Instrumen penelitian terdiri dari Tes Kemampuan TPACK, Analisis Isi Dokumen Rencana Pelaksanaan Pembelajaran, Observasi Pembelajaran dan wawancara. Teknik analisis data secara deskriptif kualitatif yang menggali informasi tentang kemampuan kognitif TPACK pada aspek *Technological Knowledge* (TK), *Pedagogical Knowledge* (PK), *Content Knowledge* (CK), *Technological Pedagogical Knowledge* (TPK), *Technological Content Knowledge* (TCK), *Pedagogical Content Knowledge* (PCK), dan *Technological Pedagogical Content Knowledge* (TPACK). Hasil kemampuan TPACK diperoleh dengan rincian TK memiliki rata-rata  $62,40 \pm 18,36$  kategori cukup baik, PK memiliki rata-rata  $65,60 \pm 16,80$  kategori baik, CK memiliki rata-rata  $75,22 \pm 11,31$  kategori baik, TPK memiliki rata-rata  $60,00 \pm 22,04$  kategori cukup baik, TCK memiliki rata-rata  $67,14 \pm 21,57$  kategori baik, PCK memiliki rata-rata  $64,29 \pm 16,87$  kategori cukup baik, TPACK memiliki rata-rata  $60,40 \pm 17,84$  kategori cukup baik.

Kata Kunci : *Analisis, Kemampuan Kognitif, TPACK*



## ABSTRACT

**Nurfajri Handayani. NIM. 8176173006.** *Analysis of Biology Teachers Technological Pedagogical Content Knowledge (TPACK) in Eleventh Grade High School (SMA Negeri) in Medan City Academic Year 2019/2020. Thesis, Program Study Magister Pendidikan Biologi. Postgraduate Program State University of Medan. 2020*

This research was conducted to find out Technological Pedagogical Content Knowledge (TPACK) abilities of biology teachers in Medan city. Population in this research was all biology teachers who taught biology in eleventh grade high school, academic year 2019/2020. The sample was 50 teachers from 14 national schools in Medan city. The instruments used were TPACK test, analysis of lesson plan sheet, learning process observation sheet and instrument for interview. Data was analyzed by using descriptive qualitative technique to find out information related to TPACK abilities in aspect of Technological Knowledge (TK), Pedagogical Knowledge (PK), Content Knowledge (CK), Technological Pedagogical Knowledge (TPK), Technological Content Knowledge (TCK), Pedagogical Content Knowledge (PCK) and Technological Pedagogical Content Knowledge (TPACK). In details, TK average score was 62,40 (fair), PK was 65,60 (good), CK was 75,22 (good), TPK was 60 (fair), TCK was 67.43 (good), PCK was 64,29 (fair) and TPACK has an average score 60.40 (good). In details, Technological Knowledge (TK) average score was 62,40 (fair), Technological Pedagogical Knowledge (TPK) was 60 (fair), Technological Content Knowledge (TCK) was 67.14 (good), and Technological Pedagogical Content Knowledge (TPACK) has an average score 60.40 (fair).

Keywords : *Analysis, Cognitive Ability, TPACK*

