

# EVALUATIVE STUDY OF TEACHER PROFESSIONAL DEVELOPMENT PROGRAM OF PPG SM3T ON TECHNOLOGICAL PEDAGOGICAL AND CONTENT KNOWLEDGE (TPACK)

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## ABSTRACT

Abstract: According to the decree of teacher and lecturer, there are four clusters of competences the teacher must have: pedagogical competences, professional competences, personality competences, and social competences. The new terms of those competences are changed slightly into what it is called TPACK. TPACK is composed of three basic knowledge: *Pedagogical Knowledge (PK)*, *Content Knowledge (CK)*, dan *Technological Knowledge (TK)*. PK, CK, and TK interact among them to perform *Pedagogical Content Knowledge (PCK)*, *Technological Pedagogical Knowledge (TPK)*, dan *Technological Content Knowledge (TCK)*. All of them then make *Technological Pedagogical and Content Knowledge (TPACK)*. This research was aimed at measuring PK, CK, and TK of the participants of teacher professional development program (PPGSM3T). The instrument was objective tests. The test was consists of 50 items, 15 items were measured the CK for high school materials of genetic, 15 measured the genetic materials for science Olympiad, 10 items measured PK, and 10 items measured TK. The topic was genetic, and it was chosen because it had various difficulty concepts and its applications. The results indicated that the score of PK, CK, and TK were 59.3, 52.9, dan 62.7. The score of CK for high school biology of genetic was 52.9 and for national Olympiad was 26.2. It was concluded that the CK, PK, and TK of the participants of teacher professional development program (PPGSM3T) is low and needs improvement.

Kata Kunci: *tpack, content knowledge, pedagogical knowledge, biology teacher, PPG, SM3T*