

Profil Keterampilan Berpikir Kreatif dan Kreativitas Siswa pada Materi Bunyi dan  
Pendengaran Berdasarkan Desain *Technological Pedagogical and Content  
Knowledge (TPACK)*

Tesis

diajukan untuk memenuhi sebagian syarat untuk memperoleh gelar  
Magister Pendidikan Ilmu Pengetahuan Alam



Oleh

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PENDIDIKAN ILMU PENGETAHUAN ALAM  
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*PROFIL KETERAMPILAN BERPIKIR KREATIF DAN KREATIVITAS SISWA PADA MATERI BUNYI DAN  
PENDENGARAN BERDASARKAN DESAIN TECHNOLOGICAL PEDAGOGICAL AND CONTENT KNOWLEDGE  
(TPACK)*

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## PERNYATAAN

Dengan ini saya menyatakan bahwa tesis dengan judul “Profil Keterampilan Berpikir Kreatif dan Kreativitas Siswa Pada Materi Bunyi dan Pendengaran Berdasarkan Desain *Technological Pedagogical and Content Knowledge (TPACK)*” ini beserta seluruh isinya adalah benar-benar karya saya sendiri. Saya tidak melakukan penjiplakan atau pengutipan dengan cara-cara yang tidak sesuai dengan etika ilmu yang berlaku dalam masyarakat keilmuan. Atas pernyataan ini, saya siap menanggung risiko/sanksi apabila di kemudian hari ditemukan adanya pelanggaran etika keilmuan atau ada klaim dari pihak lain terhadap keaslian karya saya ini.

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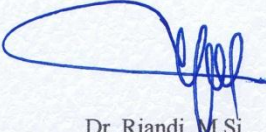
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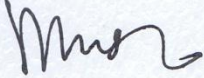
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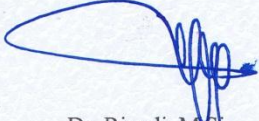
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**PROFIL KETERAMPILAN BERPIKIR KREATIF DAN KREATIVITAS  
SISWA PADA MATERI BUNYI DAN PENDENGARAN BERDASARKAN  
DESAIN TECHNOLOGICAL PEDAGOGICAL AND CONTENT  
KNOWLEDGE (TPACK)**

**ABSTRAK**

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Tujuan dari penelitian ini adalah menyelidiki bagaimana TPACK guru dalam meningkatkan keterampilan berpikir kreatif dan mengidentifikasi kreativitas siswa. Penelitian ini merupakan penelitian deskriptif dengan melibatkan dua orang guru dan 59 siswa kelas VIII di salah satu SMP di Kota Bandung. Instrumen penelitian terdiri dari *CoRe +Technology*, lembar observasi pembelajaran, soal uraian keterampilan berpikir kreatif, rubrik keterampilan berpikir kreatif dan rubrik kreativitas siswa. Data desain TPACK guru diperoleh melalui analisis jawaban *CoRe +Technology*. Data keterlaksanaan desain TPACK diperoleh melalui observasi proses pembelajaran. Peningkatan keterampilan berpikir kreatif diukur melalui tes tertulis yang dilaksanakan sebelum kegiatan pembelajaran dan sesudah proses pembelajaran sedangkan kreativitas siswa diukur melalui produk yang dibuat siswa. Hasil penelitian menunjukkan desain konsep, penyampaian konsep serta teknologi yang diajukan oleh guru tidak jauh berbeda satu sama lain. Guru mampu mendesain pembelajaran untuk meningkatkan keterampilan berpikir siswa serta mengasah kreativitas siswa dengan kerangka TPACK. Keterlaksanaan desain TPACK guru tidak menunjukkan banyak kesenjangan antara desain dan proses pelaksanaan. Terdapat peningkatan pada keterampilan berpikir kreatif siswa di kedua kelas, peningkatan tertinggi ada pada aspek keterampilan berpikir *fluency* dan yang terendah adalah aspek *originality*. Produk yang dibuat siswa telah memuat aspek *novelty, effective* dan *wholeness*. Aspek *wholeness* memperoleh presentase tertinggi sebesar 87,5%.

Kata Kunci : TPACK, *CoRe +Technology*, pelaksanaan pembelajaran, keterampilan berpikir kreatif, kreativitas siswa

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**STUDENTS' CREATIVE THINKING SKILLS AND CREATIVITY  
PROFILE IN LEARNING SOUND WAVE AND HEARING BASED ON  
DESAIN TECHNOLOGICAL PEDAGOGICAL AND CONTENT  
KNOWLEDGE (TPACK)**

**ABSTRACT**

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The purpose of this study was to investigate the teacher's TPACK in improving students' creative thinking skills and creativity, learning implementation, creative thinking skills and student creativity. This research is a descriptive type research with convenience sampling technique. The samples was two teachers and 59 students of class VIII SMP in Bandung. The instruments used were CoRe + Technology, learning observation sheets, written tests of creative thinking skills, rubrics of creative thinking skills and creativity. The improvement of creative thinking skills is measured through written tests before learning activities and after the learning process while for students' creativity is measured through student-made products. The result show in deciding the concept, how to delivery the concepts and the technology proposed by the teacher there are similiraty. Teachers is able to design learning activity to improve students' creative thinking skills and students' creativity through a TPACK framework. The implementation of TPACK design by teachers does not show many gaps between planning and implementation processes. There is an improvement in students' creative thinking skills in both classes, the highest increase is in the aspect of fluency and the lowest is originality aspect. Product made by students contain of creativity aspect consist of novelty, effective and wholeness aspects. The wholeness aspect gain the highest percentage of 87.5%.

**Key words:** TPACK, implementation of learning activity, creative thinking skills, Creativity

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