

**ANALISIS KETERAMPILAN DAN DISPOSISI BERPIKIR KRITIS  
PESERTA DIDIK PADA *PROJECT BASED LEARNING* (PjBL)  
TERINTEGRASI STEM (*SCIENCE TECHNOLOGY ENGINEERING AND  
MATHEMATICS*) MENGGUNAKAN ASESMEN AUTENTIK**

**TESIS**

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**oleh**

**EJA**

**NIM. 1707228**

**PROGRAM STUDI PENDIDIKAN FISIKA  
SEKOLAH PASCASARJANA  
UNIVERSITAS PENDIDIKAN INDONESIA**

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Oleh

Eja

S.Pd. UPI, 2004

Sebuah Tesis yang diajukan untuk memenuhi salah satu syarat memperoleh gelar  
Magister Pendidikan (M.Pd.) pada Program Studi Pendidikan Fisika

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HALAMAN PENGESAHAN TESIS

Eja  
1707228


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TERINTEGRASI STEM (*SCIENCE TECHNOLOGY ENGINEERING AND  
MATHEMATICS*) MENGGUNAKAN ASESMEN AUTENTIK

Disetujui dan Disahkan Oleh:  
Pembimbing I



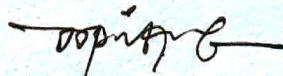
Irma Rahma Suwarma, M.Pd., Ph.D.  
NIP 198105032008012015

Pebimbing II



Dr. Taufik Ramlan Ramalis, M.Si.  
NIP 195904011986011001

Mengetahui,  
Ketua Program Studi Pendidikan Fisika  
Sekolah Pascasarjana Universitas Pendidikan Indonesia



Dr. Taufik Ramlan Ramalis, M.Si.  
NIP 195904011986011001

ANALISIS KETERAMPILAN DAN DISPOSISI BERPIKIR KRITIS PESERTA DIDIK PADA *PROJECT BASED LEARNING* (PjBL) TERINTEGRASI STEM (*SCIENCE TECHNOLOGY ENGINEERING AND MATHEMATICS*) MENGGUNAKAN ASESMEN AUTENTIK

**Eja**

Email: ejasatu@gmail.com

Program Studi Pendidikan Fisika  
Sekolah Pascasarjana Universitas Pendidikan Indonesia

**ABSTRAK**

Keterampilan berpikir kritis dan disposisi berpikir kritis merupakan dua hal yang saling berhubungan dan harus dimiliki oleh seorang pemikir kritis, sehingga keduanya harus secara eksplisit dilatihkan dan dikembangkan bersama. Namun berbagai penelitian yang pernah dilakukan menunjukkan keterampilan dan disposisi berpikir kritis pada saat ini masih rendah. Salah satu model pembelajaran yang dapat melatih dan mengembangkan keterampilan dan disposisi berpikir kritis adalah model PjBL terintegrasi STEM. Penelitian ini bertujuan untuk memperoleh informasi hasil analisis keterampilan dan disposisi berpikir kritis dalam PjBL terintegrasi STEM dengan menggunakan asesmen autentik. Metode penelitian yang digunakan adalah metode campuran dengan *sequential exploratory design* yang diterapkan pada 34 peserta didik kelas 8 di salah satu SMP Negeri Kota Bandung. Instrumen penelitian yang digunakan berupa asesmen autentik yang terdiri atas tugas kinerja, asesmen sejawat, lembar observasi, penilaian diri serta lembar keterlaksanaan pembelajaran PjBL STEM. Analisis data keterampilan dan disposisi berpikir kritis menggunakan IRT *Graded Response Model*. Hasil penelitian menunjukkan keterampilan berpikir kritis peserta didik berkategori tinggi, dengan jumlah terbesar pada aspek eksplanasi dan jumlah terkecil pada aspek evaluasi. Disposisi berpikir kritis peserta didik berkategori tinggi, dengan dengan jumlah terbesar pada indikator rasa ingin tahu dan jumlah terkecil pada indikator sistematis. Berdasarkan hasil penelitian, dapat disimpulkan keterampilan dan disposisi berpikir kritis peserta didik dalam PjBL STEM menggunakan asesmen autentik masing-masing berkategori tinggi.

Kata Kunci: keterampilan berpikir kritis, disposisi berpikir kritis, *project based learning*, STEM, asesmen autentik

**ANALYSIS OF STUDENT'S CRITICAL THINKING ABILITY AND  
DISPOSITIONS IN PROJECT BASED LEARNING (PjBL) INTEGRATED**

# **STEM (SCIENCE TECHNOLOGY ENGINEERING AND MATHEMATICS) USING AUTHENTIC ASSESSMENTS**

**Eja**

Email: ejasatu@gmail.com

Physics Education Study Program

School of Postgraduate Indonesia Unviversity of Education

## **ABSTRACT**

Critical thinking ability and critical thinking disposition are two things that are interconnected and must be possessed by a critical thinker, so both of them must be explicitly trained and developed together. However, various studies that have been conducted show that critical thinking ability and critical thinking disposition are currently low. One of learning model that can train and develop critical thinking ability and critical thinking disposition is PjBL intgrated STEM. This study aims to obtain information on the results of critical thinking ability and critical thinking disposition analysis in PjBL integrated STEM using authentic assessments. The research method used was mixed method with sequential exploratory design that was applied to 34 students of 8<sup>th</sup> grade in one of Junior High Schools in Bandung City. The research instruments used were authentic assessments consisting of task and rubric, peer assessments, observation sheets, self-assessments and PjBL-STEM learning observation sheets. Analysis of critical thinking ability and critical thinking disposition using the IRT Graded Response Model. The results showed that students' critical thinking ability was high category, with the largest number on the explanation aspect and the smallest number on the evaluation aspect. Students' critical thinking disposition was high category, with the largest number on the indicator of inquisitive and the smallest number on the systematic indicator. Based on the results of the research, it can be concluded that critical thinking ability and critical thinking disposition in PjBL STEM learning using authentic assessment each has high category.

Keyword: critical thinking ability, critical thinking disposition, *project based learning*, STEM, authentic assessment

## **DAFTAR ISI**

viii

v

<b>HALAMAN JUDUL .....</b>	<b>i</b>
<b>HALAMAN HAK CIPTA .....</b>	<b>ii</b>
<b>HALAMAN PENGESAHAN TESIS.....</b>	<b>iii</b>
<b>PERNYATAAN.....</b>	<b>iv</b>
<b>UCAPAN TERIMA KASIH.....</b>	<b>v</b>
<b>ABSTRAK .....</b>	<b>vii</b>
<b>ABSTRACT .....</b>	<b>viii</b>
<b>KATA PENGANTAR.....</b>	<b>ix</b>
<b>DAFTAR ISI.....</b>	<b>x</b>
<b>DAFTAR TABEL.....</b>	<b>xii</b>
<b>DAFTAR GAMBAR.....</b>	<b>xiii</b>
<b>DAFTAR LAMPIRAN .....</b>	<b>xv</b>
<b>BAB I PENDAHULUAN .....</b>	<b>1</b>
1.1 Latar Belakang .....	1
1.2 Rumusan Masalah.....	7
1.3 Tujuan Penelitian .....	8
1.4 Manfaat Penelitian .....	8
1.5 Definisi Operasional .....	9
1.6 Struktur Organisasi Tesis .....	10
<b>BAB II KAJIAN PUSTAKA .....</b>	<b>12</b>
2.1 <i>Science, Technology, Engineering and Mathematics (STEM)</i> .....	12
2.2 <i>Model Project Based Learning Terintegrasi STEM (PjBL-STEM)</i> .....	15
2.3 Keterampilan Berpikir Kritis .....	23
2.4 Disposisi Berpikir Kritis .....	27
2.5 Asesmen Autentik.....	32
2.6 Keterkaitan Model PjBL- STEM dengan Keterampilan Berpikir Kritis dan Disposisi Berpikir Kritis. ....	39
2.7 Analisis Materi Gelombang Bunyi .....	42
2.8 <i>Item Response Theory (IRT)</i> .....	43
2.9 Penelitian yang Relevan.....	49
2.10 Kerangka Pikir .....	52
<b>BAB III METODE PENELITIAN .....</b>	<b>55</b>

3.1	Metode dan Desain Penelitian .....	55
3.2	Populasi dan Sampel Penelitian .....	56
3.3	Instrumen Penelitian .....	56
3.3.1	Instrumen Keterampilan Berpikir Kritis .....	57
3.3.2	Instrumen Disposisi Berpikir Kritis .....	57
3.3.3	Lembar Observasi Keterlaksanaan Pembelajaran .....	58
3.4	Prosedur Penelitian .....	59
3.5	Teknik Pengumpulan Data.....	62
3.6	Teknik Analisis Data.....	63
3.6.1	Analisis Data Kualitatif.....	63
3.6.2	Analisis Data Kuantitatif.....	65
3.6.3	Analisis Karakteristik Asesmen autentik .....	66
3.6.4	Analisis Data Keterlaksanaan Pembelajaran.....	67
<b>BAB IV</b>	<b>TEMUAN DAN PEMBAHASAN .....</b>	<b>69</b>
4.1	Keterlaksanaan Pembelajaran PjBL Terintegrasi STEM.....	69
4.2	Karakteristik Asesmen Autentik .....	74
4.3	Analisis Keterampilan Berpikir Kritis .....	78
4.3.1	Analisis Keterampilan Berpikir Kritis Berdasarkan Tugas Kinerja Peserta Didik .....	78
4.3.2	Analisis Keterampilan Berpikir Kritis Berdasarkan Hasil Asesmen Sejawat .....	90
4.4	Analisis Disposisi Berpikir Kritis .....	93
4.4.1	Analisis Disposisi Berpikir Kritis Berdasarkan Hasil Lembar Observasi.....	93
4.4.2	Analisis Disposisi Berpikir Kritis Berdasarkan Hasil Penilaian Diri.....	101
<b>BAB V</b>	<b>SIMPULAN, IMPLIKASI, DAN REKOMENDASI .....</b>	<b>105</b>
5.1	Simpulan .....	105
5.2	Implikasi .....	105
5.3	Rekomendasi.....	108
<b>DAFTAR PUSTAKA</b>	<b>.....</b>	<b>108</b>

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