

**PENGEMBANGAN MODEL ASESMEN ALTERNATIF  
UNTUK MENGUKUR KETERAMPILAN ABAD 21 DENGAN  
PENDEKATAN *PROJECT BASED LEARNING*  
PADA MATERI KINEMATIKA**

**TESIS**

**diajukan untuk memenuhi sebagian dari syarat untuk memperoleh gelar  
Magister Pendidikan Program Studi Pendidikan Fisika**



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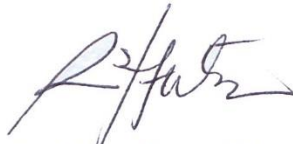
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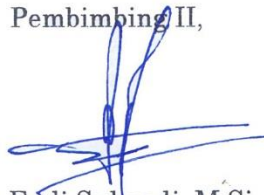
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**ABSTRAK**

Penelitian ini memiliki tujuan untuk mendapatkan model penilaian keterampilan abad 21 dalam pembelajaran fisika. Model penilaian dikembangkan dari rubrik Suzie dan Boss beserta aspek-aspek keterampilan abad 21 dengan pendekatan *Project Based Learning* berdasarkan arahan dari Buck Institut for Education (BIE). Partisipan dari penelitian ini adalah beberapa guru fisika SMK dan siswa kelas X dari salah satu SMK swasta di kota Banjar. Sampel dengan jumlah 60 siswa, dengan ketentuan siswa yang dipilih telah mengikuti pembelajaran materi gerak lurus beraturan dan berubah beraturan, dan guru sebanyak 8 orang, yang mengikuti workshop. Teknik pemilihan sampel ialah secara *Random Sampling*. Metode penelitian yang digunakan dalam penelitian ini adalah metode *Desain Based Research*. Tahapan-tahapan yang digunakan dalam penelitian ini meliputi analisis kebutuhan, serta mendesain draf model asesmen alternatif dan Implementasi dengan uji lapangan. Hasil penelitian menunjukkan pengembangan Model Asesmen Alternatif untuk mengukur keterampilan abad 21 dengan pendekatan *Project Based Learning* dalam pembelajaran kinematika gerak lurus beraturan dan berubah beraturan telah tervalidasi, dan untuk reliabilitasnya memiliki nilai yang berbeda-beda tiap aspek yang diukur dan nilai rata-rata reliabilitasnya tergolong tinggi dengan arti reliabel.

Kata kunci: Asesmen Alternatif, *Project Based Learning*, Keterampilan Abad 21.

DEVELOPMENT OF ALTERNATIVE ASSESSMENT MODELS  
TO MEASURE CENTURY SKILLS 21  
WITH A PROJECT BASED LEARNING APPROACH  
IN KINEMATICS MATERIALS

**ABSTRACT**

This study aims to obtain a 21st century skills assessment model in physics learning. The assessment model was developed from the Suzie and Boss rubric along with 21st century skills aspects with the Project Based Learning approach based on directions from the Buck Institute for Education (BIE). The participants of this study were several vocational physics teachers and class X students from one of the private vocational schools in the city of Banjar. Samples with a total of 60 students, provided that the selected students had attended regular and irregular, straight-motion material learning, and as many as 8 teachers, who attended the workshop. The sample selection technique is Random Sampling. The research method used in this study is the Design Based Research method. The stages used in this study include needs analysis, as well as designing a draft alternative assessment model and implementation with field tests. The results showed that the development of an Alternative Assessment Model to measure 21st century skills with the Project Based Learning approach in regular and irregular motion kinematics learning was validated, and the reliability had different values for each aspect measured and the average value of reliability was high. with reliable meaning

Keywords: Alternative Assessment, Project Based Learning, 21st Century Skills

## DAFTAR ISI

### HALAMAN COVER

<b>LEMBAR PENGESAHAN .....</b>	<b>i</b>
<b>PERNYATAAN.....</b>	<b>ii</b>
<b>ABSTRAK .....</b>	<b>iii</b>
<b>KATA PENGANTAR.....</b>	<b>v</b>
<b>UCAPAN TERIMA KASIH.....</b>	<b>vii</b>
<b>DAFTAR ISI.....</b>	<b>viii</b>
<b>DAFTAR TABEL.....</b>	<b>ix</b>
<b>DAFTAR GAMBAR.....</b>	<b>xii</b>
<b>DAFTAR LAMPIRAN .....</b>	<b>xiii</b>

### **BAB I PENDAHULUAN..... 1**

1.1	Latar Belakang.....	1
1.2	Rumusan Masalah.....	4
1.3	Tujuan Penelitian.....	5
1.4	Manfaat Penelitian.....	5
1.5	Struktur Organisasi Tesis.....	5

### **BAB II KAJIAN PUSTAKA ..... 7**

2.1	Perkembangan Asesmen terkait Pengukuran Keterampilan Abad 21 .....	7
2.2	Contoh Pengembangan Rubrik .....	19
2.3	Penelitian yang relevan .....	46

### **BAB III METODE PENELITIAN ..... 47**

3.1	Desain Penelitian .....	47
3.2	Partisipan .....	49
3.3	Populasi dan Sampel.....	49

3.4	Instrumen Penelitian .....	49
3.5	Hasil Instrumen Penelitian.....	51
3.6	Prosedur Penelitian .....	53
<b>BAB IV HASIL TEMUAN DAN PEMBAHASAN.....</b>		<b>55</b>
4.1	Hasil Temuan.....	55
4.2	Pembahasan .....	82
<b>BAB V SIMPULAN REKOMENDASI DAN IMPLIKASI .....</b>		<b>93</b>
5.1	Simpulan.....	93
5.2	Rekomendasi .....	93
5.3	Implikasi .....	94
<b>DAFTAR PUSTAKA .....</b>		<b>95</b>

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