

**PENGEMBANGAN MODEL PEMBELAJARAN  
BERDEFERENSIASI DENGAN REFLEKSI 4P BERBASIS  
*GUIDE NOTE TAKING* BAGI PESERTA DIDIK  
BERKESULITAN BELAJAR MATEMATIKA  
DI KELAS IV SEKOLAH DASAR**

**TESIS**

Diajukan Untuk Melengkapi dan Memenuhi Persyaratan  
Memperoleh Gelar Magister Pendidikan



**Uhamka**  
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UNIVERSITAS MUHAMMADIYAH PROF. DR. HAMKA  
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## LEMBAR PENGESAHAN

### PENGEMBANGAN MODEL PEMBELAJARAN BERDIFERENSIASI DENGAN REFLEKSI 4P BERBASIS GUIDE NOTE TAKING BAGI PESERTA DIDIK BERKESULITAN BELAJAR MATEMATIKA DI KELAS IV SEKOLAH DASAR

TESIS

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23/8 24

21/8 24

19/7 24

12/7 24

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## ABSTRAK

**Fajriyatul Hidayah.** 2024. Pengembangan Model Pembelajaran Berdeferensiasi Dengan Refleksi 4P Berbasis *Guide Note Taking* Bagi Peserta Didik Berkesulitan Belajar Matematika Di Kelas IV Sekolah Dasar. Tesis. Program Studi Pendidikan Dasar Sekolah Pasca Sarjana Universitas Muhammadiyah Prof. Dr. Hamka. Pembimbing (I) Prof. Dr. Hj. A. Suhaenah Suparno. Pembimbing (II) Dr. Hj. Yessy Yanita Sari, M.Pd

**Kata Kunci :** Model Pembelajaran berdiferensiasi, Peserta Didik Berkesulitan Belajar Matematika, Refleksi 4P, *Guide Note Taking*.

Penelitian ini merupakan penelitian dan pengembangan berdasarkan tahapan penelitian dan pengembangan *Borg & Gall*. Hasil penelitian ini adalah model pembelajaran berdiferensiasi dengan refleksi 4P berbasis *guide note taking* (catatan terbimbing) untuk peserta didik berkesulitan belajar Matematika. Refleksi 4P yaitu kegiatan untuk merefleksikan Peristiwa (*Fact*), Perasaan (*Feelings*), Pembelajaran (*Findings*) dan Penerapan ke depan (*Future*) yang terjadi pada saat pembelajaran.

Perangkat pendukung pembelajaran terdiri dari Modul Ajar, Lembar Kerja Peserta didik, Lembar Refleksi 4P berbasis *Guide Note Taking*, dan Asesmen Sumatif. Hasil analisis penilaian kevalidan perangkat pendukung pembelajaran menunjukkan katagori “sangat valid”. Hasil angket penilaian guru diperoleh persentase 81% dengan katagori “sangat praktis”. Kepraktisan berdasarkan penilaian peserta didik berkesulitan belajar Matematika sebesar 90% sehingga termasuk dalam katagori sangat praktis. Keefektifan model pembelajaran dilihat dari hasil belajar yang diperoleh melalui *pre-test* dan *post-test*. Analisis *pre-test* dan *post-test* diuji menggunakan Uji Wilcoxon Signed Rank Test 5% menunjukkan peserta didik berkesulitan belajar Matematika mengalami peningkatan hasil belajar secara signifikan. Hasil analisis korelasi antara apresiasi peserta didik berkesulitan belajar Matematika terhadap model pembelajaran yang dikembangkan dengan hasil belajarnya menggunakan Uji Rank Spearman memperoleh nilai koefisien korelasi yaitu sebesar Sig (*2-tailed*) 0,004 pada taraf signifikansi 5%. Ini artinya ada korelasi positif antara apresiasi peserta didik terhadap pembelajaran berdiferensiasi dengan refleksi 4P berbasis *guide note taking* dengan hasil belajar Matematika.

## ABSTRACT

**Fajriyatul Hidayah.** 2024. Development of a Differentiated Learning Model with 4P Reflection Based on *Guide Note Taking* for Students Who Have Difficulty Learning Mathematics in Grade IV Elementary School. Thesis. Muhammadiyah University Postgraduate School Basic Education Study Program Prof. Dr. Hamka. Supervisor (1) Prof. Dr. Hj. A. Suhaenah Suparno . Supervisor (II) Dr. Hj. Yessy Yanita Sari, M.Pd

**Keywords** : Differentiated learning model, Students with Difficulties Learning, Mathematics, 4P Reflection

This research is development research based on *Borg & Gall* theory. The result of this research is a differentiated learning model with 4P reflection based on *guided note taking* for students who have difficulty learning Mathematics. 4P reflection is an activity to reflect on events (*facts*), feelings (*feelings*), learning (*findings*) and future application (*future*) that occur after learning.

Learning support tools consisted of Teaching Modules, Student Worksheets, 4P Reflection Sheets based on *Guide Note Taking*, and Summative Assessments. The results of the analysis of the validity assessment of learning support tools show the category "high validity". The results of the teacher assessment questionnaire obtained a percentage of 81% belong to "highly practical" category. Practicality based on the assessment of students who have difficulty learning Mathematics is 90% so it is included in the very practical category. The effectiveness of the learning model can be seen from the learning results obtained through *the pre-test* and *post-test*. The *pre-test* and *post-test* analysis was tested using the Wilcoxon Signed Rank Test 5% showing that students who had difficulty learning Mathematics experienced a significant increase in learning outcomes. The results of the correlation analysis between the appreciation of students with learning difficulties in Mathematics towards differentiated learning with 4P reflection based on *guide note taking* and their learning outcomes, obtained a correlation coefficient value of 0.771836 at a significance level of 5%. This meaning there was a positive correlation between students' appreciation of learning, differentiated with 4P reflection based on *guided note taking* with Mathematics learning outcomes.



## ABSTRACT

**Fajriyatul Hidayah.** 2024. Development of a Differentiated Learning Model with 4p Reflection Based on *Guide Note Taking* for Students Who Have Difficulty Learning Mathematics in Class IV Elementary School. Muhammadiyah University Postgraduate School Basic Education Study Program Prof. Dr. Hamka. Supervisor (I) Prof. Dr. Hj. A. Suhaenah Suparno . Supervisor (II) Dr. Hj. Yessy Yanita Sari, M.Pd

**Keywords:** Differentiation, Difficulty Learning Mathematics, 4P Reflection, Guide Note Taking, Learning Model

This research is a type of development research. The results of this research are a differentiated learning model with 4P reflection for students who have difficulty learning Mathematics. 4P reflection is an activity to reflect on events (facts), feelings (feelings), learning (findings) and future application (future) that occur after learning. This reflection is presented using a note taking guide to guide students who have difficulty learning Mathematics to reflect.

The research and development carried out is based on the research and development stages of Borg & Gall. Borg & Gall which includes stages a. Search and data collection; b. Planning; c. Development of initial product form; d. Initial field trials; e. Revision of initial field trial results; f. Play field trials. Validity assessment of product validity assessment instrument sheets in the form of Teaching Modules, Student Worksheets, 4P Reflection Sheets based on Guide Note Taking, and Summative Assessment Sheets, Teacher and Student Practicality Questionnaires, Learning Implementation Observation Sheets, and Student Appreciation Sheets. Validation of the instrument sheet was carried out by two education experts and a materials expert. This instrument received a score of 32.3 with a percentage of 80% so it is included in the "valid" category and is suitable for use with slight revisions. This instrument sheet is then used to assess the validity of learning support tools such as Teaching Modules, LKPD, 4P Reflection Sheets based on guide note taking and Summative Assessments. Assessment of supporting tools for learning models is also carried out by education experts and material experts. The results of the validity assessment analysis obtained a validity score for the Teaching Module of 93 or a percentage of 85% with the category "very valid", the Student Worksheet obtained an average score of 64, a percentage of 88% with the category " very valid", the 4P Reflection Sheet Based on Guide Note Taking obtained a score of 53.3, a percentage of 82% in the "very valid" category and the Summative Assessment showed a total score of 74, a percentage of 99% in the " very valid" category. The initial trial phase was carried out on one teacher and three students who had difficulty learning Mathematics Class IVA SDN Cipete Selatan 03. The main field trial stage was carried out on one teacher and seven students who had difficulty learning Mathematics Class IVC SDN Cipete Selatan 03 The

effectiveness of the Learning model is seen from the learning outcomes obtained through pre-tests and post-tests carried out on students who have difficulty learning Mathematics. The average learning result at the pre-test was 49.85 and at the post-test the average learning result showed a value of 72.85. The learning results of students who have difficulty learning Mathematics show an average increase of 23% in the material. The pre-test and post-test analyzes were then tested using the Wilcoxon Signed Rank Test 5%. The results showed that there was no reduction (decrease) from pre-test scores to post-test scores and the seven students who had difficulty learning Mathematics experienced an increase in Mathematics learning outcomes. The results of the correlation analysis between the appreciation of students with difficulties learning Mathematics differentiated learning with 4P reflection based on guided note taking and the learning outcomes of students with difficulties learning Mathematics, obtained a correlation coefficient value of 0.771836 at a significance level of 5 %. The results of the correlation coefficient significance test stated that there was a positive correlation between students' appreciation of differentiated learning with 4P reflection based on guided note taking and Mathematics learning outcomes.