

ABSTRAK**PENGEMBANGAN E-LKPD DENGAN DIFERENSIASI PROSES
PADA MATERI KINETIKA KIMIA**

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Penelitian ini bertujuan untuk mengembangkan dan menguji kelayakan Lembar Kerja Peserta Didik Elektronik (E-LKPD) dengan diferensiasi proses pada materi kinetika kimia. Latar belakang penelitian ini adanya kesulitan peserta didik dalam memahami konsep kinetika kimia yang kompleks, serta dominannya penggunaan bahan ajar konvensional. Model pengembangan yang digunakan adalah ADDIE yang terdiri atas tahapan *Analysis*, *Design*, *Development*, *Implementation*, dan *Evaluation*. Uji coba terbatas dilakukan pada 21 peserta didik kelas XI SMA. Analisis data menggunakan pendekatan deskriptif kuantitatif melalui perhitungan *N-Gain*, dan persentase respons. Hasil penelitian menunjukkan bahwa E-LKPD yang dikembangkan memenuhi kriteria kelayakan. Dari aspek validitas, hasil validasi oleh tim ahli menunjukkan bahwa E-LKPD sangat layak digunakan dengan nilai rata-rata: aspek isi 92%, aspek kegiatan 88,8%, aspek tampilan dan visual 95%, serta aspek bahasa 93,3%, sehingga diperoleh rata-rata keseluruhan 92,4%. Dari aspek kepraktisan, E-LKPD dinilai sangat baik berdasarkan tingkat persetujuan “Sangat Setuju” dari peserta didik terhadap pernyataan dalam angket respons, yang menunjukkan bahwa E-LKPD menarik minat belajar serta mudah digunakan. Dari aspek efektivitas, analisis *N-Gain* setiap gaya belajar menunjukkan peningkatan hasil belajar peserta didik dengan kategori “Sedang” pada skor gaya belajar auditori 0,64, gaya belajar visual 0,69, dan gaya belajar kinestetik 0,68. Dengan demikian, E-LKPD ini terbukti efektif dan praktis dalam meningkatkan hasil belajar pada materi kinetika kimia, serta dapat menjadi alternatif bahan ajar inovatif yang mampu mengakomodasi perbedaan karakteristik peserta didik.

Kata Kunci: E-LKPD, Diferensiasi proses, Kinetika kimia.

ABSTRACT**DEVELOPMENT OF ELECTRONIC STUDENT WORKSHEETS WITH
PROCESS DIFFERENTIATION IN CHEMICAL KINETICS MATERIAL**

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This study aims to develop and evaluate the feasibility of an Electronic Student Worksheet with process differentiation for the topic of chemical kinetics. The background of this research lies in students' difficulties in understanding the complex concepts of chemical kinetics and the continued dominance of conventional teaching methods. The development model used is ADDIE, which includes the stages of Analysis, Design, Development, Implementation, and Evaluation. A limited trial was conducted with 21 eleventh-grade high school students. Data were analyzed using a quantitative descriptive approach through N-Gain calculations and response percentages. The results show that the developed student worksheet meets the feasibility criteria. In terms of validity, expert validation indicated that the student worksheets are highly feasible, with average scores of 92% for content, 88.8% for activities, 95% for appearance and visuals, and 93.3% for language, resulting in an overall average of 92.4%. Regarding practicality, the student worksheets received highly positive responses, as indicated by the "Strongly Agree" ratings from students, showing that it is engaging and easy to use. In terms of effectiveness, the N-Gain analysis for each learning style shows an increase in student learning outcomes with a "Medium" category with score 0,64 for the auditory learning style, 0,69 for the visual learning style, and 0,68 for kinesthetic learning style. Thus, the student worksheet has proven to be both effective and practical in improving learning outcomes in chemical kinetics and can serve as an innovative alternative learning resource that accommodates diverse student characteristics.

Keywords: *Electronic student worksheets, Process differentiation, Chemical kinetics.*