

ABSTRAK

Aisyatur Radhwa Marpaung. Inovasi e-LKPD Berbantuan *liveworksheet* Berbasis HOTS Pada Materi Kimia Semester Genap Kelas X SMA Kurikulum Merdeka. Tesis. Medan : Program Pascasarjana Universitas Negeri Medan. 2023.

Penelitian ini bertujuan untuk mengembangkan e-LKPD berbantuan *liveworksheet* berbasis HOTS, mengetahui hasil belajar yang diperoleh dan aktivitas belajar peserta, melihat hubungan aktivitas dan hasil belajar peserta didik, serta melihat respon peserta didik terhadap penerapan e-LKPD berbantuan *liveworksheet* berbasis HOTS dalam pembelajaran kimia. Penelitian ini dilakukan di SMA Swasta Al Azhar Medan menggunakan metode R & D (*Research and Development*) dengan model ADDIE (*Analyst, Design, Development, Implementation, Evaluation*). Subjek penelitian ini sejumlah satu kelas terdiri dari 29 orang peserta didik yang dilakukan secara *purposive sampling* Instrumen penelitian berupa angket wawancara, angket kelayakan BSNP yang telah dimodifikasi, instrument tes, angket aktivitas belajar peserta didik, dan angket respon peserta didik terhadap penggunaan e-LKPD berbantuan *liveworksheet* berbasis HOTS. Teknik analisis yang digunakan adalah teknik analisis data deskriptif dan statistik inferensial yaitu uji t (*one sample t-test*) serta uji korelasi. Hasil penelitian diperoleh bahwa e-LKPD berbantuan *liveworksheet* berbasis HOTS yang dikembangkan telah layak sesuai dengan BSNP dengan perolehan rata-rata kelayakan dari 3 ahli materi sebesar 3.59 (Layak), rata-rata kelayakan ahli media sebesar 4.59 (Layak), dan rata-rata kelayakan dari 3 orang guru kimia sebesar 3.78 (Layak). Hasil uji *one sample t-test* diperoleh nilai $t_{hitung} = 7,966 > t_{tabel} = 2,048$, maka H_a diterima sedangkan nilai sig. (*2-tailed*) = 0,000 < nilai $\alpha = 5\%$ (0,05) yang menunjukkan H_0 ditolak dan H_a diterima dengan hipotesis yang berbunyi bahwa hasil belajar peserta didik yang diajarkan dengan menggunakan e-LKPD berbantuan *liveworksheet* berbasis HOTS lebih tinggi dari pada interval nilai Kriteria Ketercapaian Tujuan Pembelajaran (KKTP) yang ditetapkan oleh pendidik atau satuan pendidikan yaitu 75-83 dengan nilai rata-rata hasil belajar peserta didik sebesar 85,17. Aktivitas dan hasil belajar peserta didik memiliki hubungan yang positif dengan kekuatan sangat kuat yang diperoleh dari nilai *Pearson Correlation* sebesar 0,844 dan koefisien determinasi sebesar 71,2%. Respon peserta didik terhadap penggunaan e-LKPD berbantuan *liveworksheet* berbasis HOTS pada materi kimia semester genap kelas X SMA Kurikulum Merdeka sangat baik dengan nilai rata-rata persentase jawaban peserta didik sebesar 89%.

Kata Kunci: e-LKPD, *liveworksheet*, HOTS, Penelitian dan Pengembangan, Kimia

ABSTRACT

Aisyatur Radhwa Marpaung. e-LKPD Innovation Assisted Live Worksheet-based HOTS on Chemistry Materials Even Semester Class X SMA Merdeka Curriculum. Thesis. Medan: Postgraduate Program, State University of Medan. 2023.

This study aims to develop e-LKPD-assisted live worksheet-based HOTS, find out the learning outcomes obtained and the learning activities of participants, see the relationship between activity and student learning outcomes, and see student responses to the implementation of e-LKPD-assisted live worksheet-based HOTS in learning chemistry. This research was conducted at Al Azhar Private High School in Medan using the R & D (Research and Development) method with the ADDIE model (Analyst, Design, Development, Implementation, Evaluation). The subjects of this study were one class consisting of 29 students who were carried out by purposive sampling. The research instruments were interview questionnaires, modified BSNP feasibility questionnaires, test instruments, student learning activity questionnaires, and student response questionnaires to the use of e-LKPD assisted live worksheets-based HOTS. The analysis technique used is descriptive data analysis technique and inferential statistics, namely the t-test (one sample t-test) and correlation test. The results showed that the e-LKPD assisted by the HOTS-based live worksheet that was developed was feasible following the BSNP with an average acquisition of 3.59 (feasible) material expert eligibility, an average media expert eligibility of 4.59 (feasible), and an average feasibility of 3 chemistry teachers is 3.78 (feasible). The results of the one sample t-test obtained a value of $t_{\text{count}} = 7.966 > t_{\text{table}} = 2.048$, so H_a was accepted while the value of sig. (2-tailed) = $0.000 < \alpha = 5\%$ (0.05) which indicates that H_0 is rejected and H_a is accepted with the hypothesis which states that the learning outcomes of students taught using e-LKPD assisted liveworksheet based on HOTS are higher than the value interval for the Learning Goal Achievement Criteria (KKTP) set by educators or educational units at school, namely 75-83 with an average score of student learning outcomes value of 85.17. Student learning activities and outcomes have a positive relationship with very strong strength obtained from a Pearson Correlation value of 0.844 and a coefficient of determination of 71.2%. Student responses to the use of e-LKPD assisted by HOTS-based live worksheets on even semester chemistry material for class X SMA Merdeka Curriculum were very good with an average percentage of student answers of 89%.

Keywords: e-LKPD, live worksheet, HOTS, Research and Development, Chemistry