

**PENGEMBANGAN VIDEO PEMBUKTIAN HIPOTESIS
PADA TOPIK TITRASI ASAM BASA UNTUK MENDUKUNG LEMBAR
KERJA PESERTA DIDIK DENGAN PENDEKATAN SAINTIFIK
MELALUI DARING**

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ABSTRAK

Penelitian ini bertujuan untuk mengembangkan produk video pembuktian hipotesis dan mendeskripsikan spesifikasinya untuk mendukung lembar kerja peserta didik pada topik titrasi asam basa dengan pendekatan saintifik. Studi merupakan penelitian dan pengembangan (R&D) dengan mengikuti model penelitian dan pengembangan Luther, yang terdiri dari tahap *concept, design, material collecting, assembly, testing, dan distribution*. Instrumen yang digunakan dalam penelitian ini meliputi format studi dokumentasi, pedoman wawancara, lembar penilaian, validasi dan uji keterbacaan. Hasil penelitian dianalisis menggunakan analisis deskriptif kualitatif, modus, dan rasional. Produk video pembuktian hipotesis memiliki karakteristik mendukung lembar kerja peserta didik yang sinergis dan konsisten mengakomodasikan langkah-langkah pendekatan saintifik 5M (mengamati, menanya, mengumpulkan data, mengasosiasikan, dan mengomunikasikan) dengan mengikuti pola penalaran induktif. Hasil produk video pembuktian hipotesis dapat diakses kapan dan dimana saja melalui link pada *google drive*. Sebagian besar aspek pembelajaran dari produk pembelajaran yang dikembangkan mendapatkan rata-rata penilaian dengan kategori baik dari ahli isi, bahasa dan media maupun praktisi. Validasi yang diberikan oleh ahli isi dan konstruksi tergolong baik dengan proporsi 82,6%, validasi yang diberikan oleh ahli bahasa tergolong sangat baik dengan proporsi 91,7%, validasi yang diberikan oleh ahli media tergolong baik dengan proporsi 78,9%, dan praktisi 1 tergolong baik dengan proporsi 84,6% serta praktisi 2 tergolong sangat baik dengan proporsi 89,4%. Hasil uji keterbacaan produk oleh siswa menunjukkan bahwa produk yang dikembangkan memiliki tanggapan positif dengan hasil pengisian LKPD menunjukkan siswa telah mampu mengisi tagihan yang diberikan serta komentar mengenai arahan, tulisan dan isi LKPD serta video sudah jelas dan mudah dipahami. Hasil validasi dan uji keterbacaan tersebut menunjukkan bahwa video pembuktian hipotesis untuk mendukung lembar kerja peserta didik tergolong baik.

Kata Kunci: video pembuktian hipotesis, lembar kerja, peserta didik, pendekatan saintifik 5M, titrasi asam-basa

VIDEO DEVELOPMENT OF HYPOTHESIS PROOF ON THE TOPIC OF ACID BASE TITRATION TO SUPPORT STUDENT WORKSHEET WITH SCIENTIFIC APPROACH THROUGH ONLINE

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ABSTRACT

This study aims to develop product specifications of hypothesis proof video and describe the specification to support student worksheets on the topic of acid-base titration with a scientific approach. This study is research and development (R&D) by following the Luther's research and development model, which consists of concept stages, design, material collecting, assembly, testing, and distribution. The instruments used in this study included documentation study formats, interview guidelines score sheets, validation, and readability tests. The results of the study were analyzed using descriptive qualitative analysis, mode, and rational. The video product of hypothesis proof has the characteristics of supporting student worksheets that are synergistic and consistent in accommodating the steps of the 5M scientific approach observing, asking, data collecting, associating, and communicating by following inductive reasoning patterns. The results of the hypothesis proving video products can be accessed anytime and anywhere via a link on google drive. Most of the learning aspects of the developed learning product get score approximately in good categories from context, language and media experts as well as practitioners. The validation provided by content and construction experts was good with a proportion of 82.6%, validation provided by linguists was very good with a proportion of 91.7%, validation provided by media experts was good with a proportion of 78.9%, and practitioner 1 was classified as good with a proportion of 84.6% and practitioner 2 was classified as very good with a proportion of 89.4%. The results of the product readability test by the student showed that the product developed had a positive response with the results of filling out the LKPD indicating that students had been able to fill in the bills given and comments regarding the directions, writing and contents of the LKPD as well as videos were clear and easy to understand. The results of the validation and readability test shows that the video of hypothesis proof to support student worksheets is classified as good. The video of hypothesis proof to support student worksheets is rated as good according to the results of the validation and readability tests.

Keywords: video to support the hypothesis, scientific worksheet, learners, Scientific approach 5M, acid-base titration