ABSTRAK

Nurhalima, 2020. Pengembangan Petunjuk Praktikum IPA berbasis *Online Learning*. Skripsi, Program Studi Pendidikan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Wiraraja. Pembimbing (1) Jefri Nur Hidayat, M.Si. (2) Herowati, S.Pd., M.Pd.

Pembelajaran IPA di SMPN 2 Kalianget dilakukan secara *online* karena adanya covid-19. Pembelajaran IPA yang dilakukan secara *online* di masa pandemic covid-19 tidak dilaksanakan berdasarkan tuntutan pendidikan revolusi industri 4.0 dan beberapa kompetensi inti dan kompetensi dasar yang ada dalam pembelajaran IPA yang mengintegrasikan kegiatan praktikum. Hal tersebut terjadi karena media pembelajaran yang mendukung tercapainya tuntutan pendidikan revolusi industri 4.0 dan terlaksananya kegiatan praktikum pada pembelajaran IPA yang dilakukan secara *online* dimasa pandemic covid-19 belum tersedia. Tujuan dari penelitian ini yaitu mengembangkan Petunjuk Praktikum IPA berbasis *Online Learning*. Penelitian ini menggunakan model penelitian pengembangan 4D yang dikemukakan oleh (Thiagarajan et al., 1974). Adapun uji yang dilakukan dalam penenlitian ini adalah uji validasi ahli dan uji coba respon guru. Uji validasi ahli meliputi, kevalidan aspek materi dan bahasa, aspek media dan format. Uji coba respon guru dilakukan menggunakan dua tahap yaitu uji coba awal (*initial testing)* dan uji coba kuantitatif (*quantitative testing)*.

Berdasarkan hasil penelitian yang diperoleh dapat disimpulkan sebagai berikut : Hasil penelitian menunjukkan bahwa tingkat kevalidan pengembangan petunjuk praktikum IPA berbasis *online learning* sangat valid dengan pesentase sebesar 97,85% yang diperoleh dari tingkat kevalidan aspek materi dan bahasa, aspek media dan format. Hasil respon guru diperoleh dengan kategori sangat baik dengan hasil pada tahap uji coba awal (*initial testing)* diperoleh sebesar 97,6%, dan pada tahap uji coba kuantitatif (*quantitative testing)* diperoleh sebesar 98,46% sehingga dapat diartikan bahwa guru memberikan respon positif dan sangat baik terhadap Pengembangan Petunjuk Praktikum IPA berbasis *Online Learning*.

Kata-kata kunci: Petunjuk Praktikum, IPA, *Online Learning*

ABSTRACT

Nurhalima, 2020. Development of Online Learning-based Science Practicum Guidelines. Thesis, Natural Science Education Study Program, Teacher Training and Education Faculty, Wiraraja University. Advisors (1) Jefri Nur Hidayat, M.Si. (2) Herowati, S.Pd., M.Pd.

Science learning at SMPN 2 Kalianget was conducted online due to covid-19. Science learning that was carried out online during the Covid-19 pandemic was not carried out based on the demands of industrial revolution 4.0 education and some of the core competencies and basic competencies that exist in science learning that integrates practicum activities. This happens because learning media that support the achievement of the demands of industrial revolution 4.0 education and the implementation of practicum activities on science learning conducted online during the Covid-19 pandemic are not yet available. The purpose of this research is to develop an Online Learning-based Natural Science Practicum Guide. This study uses the 4D development research model proposed by (Thiagarajan et al., 1974). The tests carried out in this study were expert validation tests and teacher response trials. Expert validation tests include, the validity of material and language aspects, media and format aspects. Teacher response testing is carried out using two stages, namely initial testing and quantitative testing.

Based on the research results obtained, it can be concluded as follows: The results showed that the validity level of the development of online learning-based science practicum instructions was very valid with a percentage of 97.85% obtained from the validity level of the material and language aspects, the media and format aspects. The teacher response results were obtained in the very good category with the results at the initial testing stage obtained at 97.6%, and at the quantitative testing stage it was obtained 98.46% so that it means that the teacher gave a positive response. and very good for the Development of Online Learning-based Natural Science Practicum Guidelines.

Key words: Practicum Instructions, Science, Online Learning