

ABSTRAK

Pada Maret tahun 2020, Pemerintah Republik Indonesia mengeluarkan peraturan terhadap pandemi Covid-19 yaitu diharuskan siswa belajar secara mandiri. Bagi daerah yang berada di zona orange dan merah dilarang melakukan pembelajaran tatap muka di satuan pendidikan dan tetap melanjutkan Belajar dari Rumah (BDR). Menteri kemendikbud mengatakan kondisi Pandemi COVID-19 tidak memungkinkan kegiatan belajar mengajar berlangsung secara normal. Terdapat ratusan ribu sekolah ditutup untuk mencegah penyebaran, sekitar 68 juta siswa melakukan kegiatan belajar dari rumah, dan sekitar empat juta guru melakukan kegiatan mengajar jarak jauh.

Beberapa kendala yang timbul dalam pelaksanaan Pembelajaran Jarak Jauh (PJJ) diantaranya kesulitan guru dalam mengelola PJJ dan masih terfokus dalam penuntasan kurikulum. Sementara itu, tidak semua orang tua mampu mendampingi anak-anak belajar di rumah dengan optimal karena harus bekerja ataupun kemampuan sebagai pendamping belajar anak. Para peserta didik juga mengalami kesulitan berkonsentrasi belajar dari rumah serta meningkatnya rasa jenuh yang berpotensi menimbulkan gangguan pada kesehatan jiwa, ujar Menteri Mendikbud[2]. Dikarenakan Indonesia sedang dilanda pandemi Covid-19 sistem Pendidikan terutama Pendidikan ekstra Robotika di SMP Muhammadiyah 5 Surabaya diharuskan siswa untuk belajar melalui media daring. Penulis berkeinginan membuat sebuah aplikasi e-learning berbasis website dengan metode waterfall yang memiliki pembelajaran secara interaktif menggunakan media video dan memiliki *online quiz* di dalamnya.

Hasil desain dan implementasi sistem ini dapat memenuhi kebutuhan Ekstrakurikuler Robotika Di SMP Muhammadiyah 5 Surabaya mengenai Sistem Pembelajaran Robotika berbasis Website. Kesimpulan ini didapatkan dengan pengujian kegunaan oleh beberapa pengguna terkait seperti admin pembelajaran, siswa dan guru menggunakan pengujian *short UEQ*.

Kata Kunci: elearning, website, smp muhammadiyah 5 surabaya, robotika.

ABSTRACT

In March 2020, the Government of the Republic of Indonesia issued regulations against the Covid-19 pandemic, which required students to study independently. For regions that are in the orange and red zones, it is prohibited to carry out face-to-face learning in education units and continue Learning from Home (BDR). The Minister of Education and Culture said the conditions of the COVID-19 pandemic did not allow teaching and learning activities to take place normally. There are hundreds of thousands of schools closed to prevent the spread, around 68 million students are conducting learning activities from home, and around four million teachers are conducting remote teaching activities.

Some of the obstacles that arise in the implementation of Distance Learning (PJJ) include difficulties for teachers in managing PJJ and are still focused on completing the curriculum. Meanwhile, not all parents are able to optimally accompany their children to study at home because they have to work or have the ability to accompany their children's learning. Students also experience difficulty concentrating on learning from home and an increased feeling of boredom which has the potential to cause mental health problems, said the Minister of Education and Culture[2]. Because Indonesia is being hit by the Covid-19 pandemic, the education system, especially extra robotics education at SMP Muhammadiyah 5 Surabaya, requires students to study through online media. The author wants to create a website-based e-learning application with the waterfall method which has interactive learning using video media and has online quizzes in it.

The results of the design and implementation of this system can meet the needs of the Robotics Extracurricular at SMP Muhammadiyah 5 Surabaya regarding the Website-based Robotics Learning System. This conclusion was obtained by testing usability by several related users such as learning admins, students and teachers using the short UEQ test.

Keywords: elearning, website, SMP Muhammadiyah 5 Surabaya, robotics.