

## ABSTRAK

**HAFIZD DARMAWAN NASUTION. Pengembangan Desain Pembelajaran Berbasis ICT Memanfaatkan Power Point, Filmora, Whatsapp Grup, Google Classroom, dan Googel Formulir Untuk Memaksimalkan Keefektifan Pembelajaran.** Tesis. Medan: Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan. 2022.

Penelitian ini bertujuan untuk: 1) mengetahui pengembangan desain pembelajaran berbasis ICT memanfaatkan *power point*, *filmora*, *whatsapp grup*, *google classroom*, dan *google formulir* dalam pembelajaran matematika; 2) mendeskripsikan tanggapan guru terhadap desain pembelajaran berbasis ICT memanfaatkan *power point*, *filmora*, *whatsapp grup*, *google classroom*, dan *google formulir* dalam pembelajaran matematika yang telah dikembangkan; 3) mendeskripsikan tanggapan siswa terhadap desain pembelajaran berbasis ICT memanfaatkan *power point*, *filmora*, *whatsapp grup*, *google classroom*, dan *google formulir* dalam pembelajaran matematika yang telah dikembangkan; 4) mengetahui keefektifan belajar siswa setelah menggunakan media pembelajaran yang dikembangkan dengan aplikasi *power point*, *filmora*, *whatsapp grup*, *google classroom*, dan *google formulir*. Penelitian ini merupakan penelitian pengembangan. Model pengembangan yang digunakan dalam penelitian ini adalah model 4-D. Hasil penelitian menunjukkan bahwa: 1) pengembangan desain pembelajaran berbasis ICT memanfaatkan *power point*, *filmora*, *whatsapp grup*, *google classroom*, dan *googel formulir* untuk meningkatkan keefektifan hasil belajar siswa yang dikembangkan memenuhi kriteria kevalidan, kepraktisan, dan keefektifan model pembelajaran interaktif; 2) Tanggapan guru terhadap desain pembelajaran berbasis ICT memanfaatkan *power point*, *filmora*, *whatsapp grup*, *google classroom*, dan *google formulir* dalam pembelajaran matematika yang telah dikembangkan ialah setuju digunakan pada pembelajaran dalam jaringan, tetapi terlalu banyak aplikasi sehingga membuat guru sedikit repot atau bekerja ekstra; 3) Tanggapan siswa terhadap desain pembelajaran berbasis ICT memanfaatkan *power point*, *filmora*, *whatsapp grup*, *google classroom*, dan *google formulir* dalam pembelajaran matematika yang telah dikembangkan ialah setuju. Sehingga menarik dan bagus, tetapi tidak semua *handphone* atau *smartphone* dapat mengakses semua aplikasi-aplikasi yang disediakan; 4) Keefektifan dalam desain pembelajaran pembelajaran berbasis ICT memanfaatkan *power point*, *filmora*, *whatsapp grup*, *google classroom*, dan *google formulir* dalam pembelajaran matematika telah efektif karena indikator-indikator telah tercapai.

**Kata Kunci:** Desain Pembelajaran, ICT, Keefektifan Belajar Siswa

## ABSTRACT

**HAFIZD DARMAWAN NASUTION. Development of ICT-Based Learning Design Utilizing Power Point, Filmora, Whatsapp Group, Google Classroom, and Google Forms to Maximize Learning Effectiveness.** Thesis. Medan: Mathematics Education Program Postgraduate School State University of Medan. 2022.

This study aims to: 1) knowing the development of ICT-based learning designs using power point, filmora, whatsapp group, google classroom, and google forms in learning mathematics; 2) describe the teacher's response to the design of ICT-based learning using power point, filmora, whatsapp group, google classroom, and google forms in mathematics learning that has been developed; 3) describe student responses to ICT-based learning designs utilizing power point, filmora, whatsapp group, google classroom, and google forms in mathematics learning that have been developed; 4) find out the effectiveness of student learning after using learning media developed with the power point application, filmora, whatsapp group, google classroom, and google forms. This research is a development research. The development model used in this study is a 4-D model. The results showed that: 1) the development of an ICT-based learning design utilizing power point, filmora, whatsapp group, google classroom, and google forms to increase the effectiveness of student learning outcomes that were developed to meet the criteria of validity, practicality, and effectiveness of interactive learning models; 2) The teacher's response to the ICT-based learning design utilizing power point, filmora, whatsapp group, google classroom, and google forms in mathematics learning that has been developed is to agree to use it in online learning, but there are too many applications that make the teacher a little bothered or work extra ; 3) Students' responses to the ICT-based learning design utilizing power point, filmora, whatsapp group, google classroom, and google forms in learning mathematics that have been developed are agree. So that it is interesting and good, but not all mobile phones or smartphones can access all the applications provided; 4) The effectiveness in the design of ICT-based learning using power point, filmora, whatsapp group, google classroom, and google forms in learning mathematics has been effective because the indicators have been achieved.

**Keywords:** Learning Design, ICT, Student Learning Effectiveness