

**PENGEMBANGAN MULTIMEDIA PEMBELAJARAN INTERAKTIF  
MENGUNAKAN MICROSOFT OFFICE POWER POINT  
PADA MATERI KULTUR JARINGAN**

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**ABSTRAK**

Dalam penyelenggaraan pendidikan secara formal, pendidik dan peserta didik dituntut untuk lebih kreatif agar tercapai tujuan pendidikan yang diharapkan. Penggunaan media pembelajaran yang baik dan tepat dapat membantu kelancaran proses belajar mengajar. Dalam mempelajari kultur jaringan di SMA terdapat kendala kesulitan dalam mengajarkan materi jika tidak diikuti dengan praktikum karena keterbatasan ketersediaan laboratorium kultur jaringan. Oleh sebab itu diperlukan multimedia pendukung pembelajaran. Penelitian ini bertujuan untuk mengembangkan multimedia pembelajaran interaktif menggunakan *microsoft power point* pada materi kultur jaringan. Penelitian ini dilakukan di kelas XI SMA Tamansiswa Pematangsiantar dengan sampel sebanyak 49 orang dan populasi sebanyak 243 orang. Penelitian ini dilakukan pada bulan April sampai dengan September 2018, dengan model pengembangan Borg & Gall. Penelitian ini terdiri dari beberapa tahapan yaitu: analisis kebutuhan multimedia pembelajaran, pembuatan kisi-kisi instrumen kelayakan multimedia, pembuatan instrumen penilaian kelayakan multimedia, pembuatan produk awal media, validasi ahli, revisi, uji coba perorangan, uji coba kelompok kecil, uji coba lapangan terbatas, dan dihasilkan produk. Produk yang dihasilkan berupa multimedia pembelajaran interaktif yang dapat digunakan guru dan siswa dalam mempelajari materi kultur jaringan di SMA. Produk dinilai layak oleh tim validasi. Hasil penilaian ahli materi menunjukkan rata-rata 96,20% terkategori sangat baik, sedangkan ahli konstruksi multimedia menunjukkan rata-rata 83,06% terkategori sangat baik. Berdasarkan uji perorangan didapat nilai rata-rata 94,97% terkategori sangat baik, uji kelompok kecil didapat nilai rata-rata 87,18% terkategori sangat baik, dan uji lapangan terbatas didapat rata-rata nilai 85,95% terkategori sangat baik.

**Kata Kunci:** *multimedia, interaktif, R&D, kultur jaringan*



**DEVELOPMENT OF INTERACTIVE LEARNING MULTIMEDIA  
USING MICROSOFT OFFICE POWER POINT  
ON TISSUE CULTURE MATERIAL**

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**ABSTRACT**

In formal education, educators and students are required to be more creative in order to achieve the expected educational goals. By using good and appropriate learning media can help the learning process. Studying tissue culture in high school, there are difficulties in teaching material if not followed by practice because of the limited availability of tissue culture laboratories. Therefore, learning multimedia is needed. This study aims to develop interactive learning multimedia using Microsoft Office Power Point on tissue culture material. This research was conducted in XI grade high school students of Tamansiswa Pematangsiantar with sample of 49 people and population of 243 people. This research was conducted from April to September 2018, with the development model of Borg & Gall. This study consisted of several stages: analysis of multimedia learning needs, making multimedia feasibility instrument grids, making multimedia feasibility assessment instruments, making media initial products, expert validation, revision, individual trials, small group trials, limited field trials , and the product is produced. The product produced in the form of interactive multimedia learning that can be used by teachers and students in studying tissue culture material in high school. The product is considered feasible by the validation team. The assessment results of material experts showed an average of 96.20% in very good categories, while multimedia construction experts showed an average of 83.06% in very good categories. Based on the individual test, the average value of 94.97% was very well categorized, the small group test obtained an average value of 87.18% categorized very well, and limited field testing obtained an average score of 85.95% in very good categories.

**Keywords:** *multimedia, interactive, development, tissue culture*