

ABSTRACT

Children with special needs, such as deaf, are children who have difficulties and deficiencies in hearing. Deaf children communicate with teachers using sign language, pictures, and writing (text) during learning activities. However, teachers sometimes have difficulty providing an overview or explaining abstract material such as photosynthesis in science subjects.

The difficulty of delivering material and the poor focus of deaf students is one of their problems in receiving material. A science learning media application was made to help teachers and students in the teaching and learning process. Science learning media is expected to increase interest in learning and understanding of photosynthetic material for deaf students.

The research methodology used two methods, data collection methods, and systems development methods. Methods of data collection used observation techniques, literature studies, and interviews. The system development method used the waterfall method.

Based on the results of system testing, which were responded by teachers and multimedia experts, the science learning media application got 84.6%. The interpretation strongly agreed that the science learning media application was suitable for use in learning activities. The science learning media application succeeded in attracting interest in learning and understanding photosynthesis to deaf students. After testing the students, 4 out of 5 students who did the test achieved the minimum score.

Keywords: Learning Media, Interactive Multimedia, Deaf, Photosynthesis



ABSTRAK

Anak Berkebutuhan Khusus (ABK) diantaranya Anak Tuna Rungu (*deaf*) merupakan anak yang memiliki kesulitan dan kekurangan dalam melakukan pendengaran. Saat kegiatan pembelajaran, anak tuna rungu berkomunikasi dengan guru menggunakan bahasa isyarat, gambar dan tulisan (*text*). Tetapi, guru terkadang kesulitan memberikan gambaran atau penjelasan materi yang abstrak seperti fotosintesis dalam mata pelajaran IPA.

Kesulitan penyampaian materi dan fokus murid tuna rungu yang kurang baik menjadi salah satu permasalahan sulitnya anak tuna rungu menerima materi. Adanya permasalahan tersebut, dibuatlah aplikasi media pembelajaran IPA untuk membantu guru dan murid dalam proses belajar mengajar. Media pembelajaran IPA diharapkan mampu meningkatkan minat belajar dan pemahaman materi fotosintesis kepada murid tuna rungu.

Metodologi penelitian yang digunakan menggunakan 2 metode, metode pengumpulan data dan metode pengembangan sistem. Metode pengumpulan data menggunakan teknik observasi, studi literatur dan wawancara. Metode pengembangan sistem menggunakan metode *waterfall*.

Berdasarkan hasil pengujian sistem yang direspon oleh guru dan ahli multimedia, aplikasi media pembelajaran IPA mendapatkan persentase 84,6% dengan interpretasi sangat setuju bahwa aplikasi media pembelajaran IPA layak digunakan dalam kegiatan pembelajaran. Aplikasi media pembelajaran IPA berhasil menarik minat belajar dan pemahaman fotosintesis kepada murid tuna rungu setelah dilakukan pengujian terhadap murid, hasilnya 4 dari 5 murid yang melakukan pengujian bisa mencapai nilai minimum.

Kata Kunci: Media Pembelajaran, Multimedia Interaktif, Tuna Rungu, Fotosintesis