

ABSTRACT

Breathing is one of the characteristics of living things that are very important. Without doing the breathing process, human beings will not live. When breathing, oxygen obtained through breathing process that is inhaling. In addition to requiring oxygen, carbon dioxide gas cells also secrete a result of metabolism. Carbon dioxide gas is very harmful for the body must be removed by a process of breathing. In a case study taken in SD Ar Rafi Bandung, delivery of a material when the respiratory system is to use an introductory book. Problems arise that students tend to get bored while studying the respiratory system materials because the materials presented only text-only. Based on these problems, the author wants to create a multimedia-based learning application to help learning and teaching of biology, especially the respiratory system. Application development method used is ADDIE (Analyze, Design, Development, Implementation and Evaluation). While the tools used for application development is Adobe Flash CS6 as a processor, animation, Adobe Photoshop CS6 as image processing and Adobe Audition CS6 as voice processing. The test results are made with blackbox testing method to test the application functionality and user acceptance test to examine the satisfaction of the applications are built. Results from making this application is used as a learning tool for students to get a better understanding of the human respiratory system materials.

Keywords : Respiratory System , ADDIE , Multimedia