

# **Create of Electronic Field Guide for Bird Habitats in Mathematics and Science Faculty For High School Students as Instructional Media in Environmental Education**

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## **ABSTRACT**

Nowadays, the number of environmental problems is growing up. One of which is due to public awareness of the environment, has not been well. Learning to recognize the components of the environment, will create public awareness developed well. Consciousness is awakened by simultaneously will be a pattern of behavior and then embodied in the character of themselves community. Environmental education is the responsibility of all of society, but biology educators and environmentalists become the frontline in this learning. One of the determinants of learning is the instructional media. Media that contain living creature identification guide will help to identify environmental components. Along with the development of technology, identification guides will further facilitate the learning process by packaging in electronic in the \*pdf format.

This research is included the development studies with the product in the form of an electronic field guide to the birds and their habitats in \*pdf format. This product was developed to follow the product development process by Thiagarajan as known as 4D. Products reviewed by two experts in birds as subject matter and two experts in instructional media material with the Likert scale 1-4, and then revised in the input of the reviewer. After that, the product will be used in the learning process of the field by 30 students. After use in the learning process, students were required response regarding product interoperability.

The results of the reviews of the two instructional media experts and two subject matter experts, get above average results for all three aspects. Aspects that are reviewed include text readability, the harmony of colors, the layout, the suitability of the file size and ease of interaction. 30 students give a score above 3 for all aspects of the response is requested. These aspects are ease of understanding, the field of learning and ease of use. The results showed that the learning media in the form of an electronic field guide bird and its habitat is able to be well received by students and can be used in learning environments.

*Kata Kunci: Birds, Habitats, Field Guide, Environment Education, Campus Tourism.*