



## **A SCOPING REVIEW ON THE STUDENTS' MISCONCEPTIONS IN NATURAL SELECTION**

**RONNIE O. DAGANASOL**

<https://orcid.org/0000-0002-4635-3026>

ronniedaganasol515@gmail.com

Liceo del Verbo Divino, Inc.

Avenida Veteranos St., Tacloban City 6500 Philippines

### **ABSTRACT**

The prevalence of misconceptions about natural selection among students across all levels are becoming problematic. However, these problems imposed by misconceptions can be seen as an opportunity for teachers to execute their big role as learning facilitators. This scoping review aims to collate and examine available literatures that can help teachers address the prevailing misconceptions of students in natural selection. Employing Arksey and O'Malley (2005) framework, inclusion criteria were formulated which left 11 records to be reviewed and analyzed. The results indicated that (1) constructivism approach renders effective teaching about natural selection, (2) gamification or game play session increases engagement in learning natural selection, and (3) use of narratives in lieu of the unavailability of technology integration to teaching of natural selection. It is recommended that curriculum planners design a coherent biology curriculum that adheres to a constructivist approach with teaching strategies incorporating the nature of science (NOS) instruction.

*Keywords:* natural selection, misconceptions, constructivism, gamification, nature of science (NOS)