Anl Syst. Ana María Loyo Vásquez
Foundation for the Development of Science and Technology
Email: anitamlv@gmail.com
ORCID code: https://orcid.org/0009-0001-0593-830

Strategies for Learning Programming in Children at the Stage of Concrete Operations Through the Creation of a Video Game

ABSTRACT

Distance education due to the COVID-19 pandemic, led the children who were the subjects of the study to stay at home almost permanently and occasionally used video games as entertainment in moments of leisure, generating the problem that the time in front of screens and video games intensified, For this reason, the research was carried out with the objective of developing strategies for learning programming in children in the concrete operations stage through the creation of a video game to introduce children to programming concepts and stimulate problem-solving skills, logical thinking, and creativity. The teaching and learning theories used were the cognitive and social constructivism of Piaget, Vygotsky and Bandura. Methodologically, a qualitative paradigm was used with the field research modality by means of a case study, descriptive type because the information was obtained directly from the subjects investigated. The population consisted of 3 persons. The data collection technique used was direct observation and collection through unstructured interviews, applied to the entire population. Based on the results obtained, it can be highlighted that the creation of video games is an effective motivator for the learning of programming in children in concrete operations, so it was concluded that video games when they are used as a motivator for the learning of programming in children in concrete operations.

Descriptors: Technology, Programming, Videogame, Learning, Software Development

Biographical Review: Systems Analyst from the Centro Occidental University Lisandro Alvarado, Full Stack Developer (HENRY), Technical Personal for Foundation for the Development of Science and Technology (FUNDACITE), Yaracuy - Venezuela.