KIBO Introduction

Grade: PreK and Kinder

Date:

Technology Topic: Programming

Subject Topic: Technology

Technology Tools

4 KIBO Robots

Objective/Focus

PreK and Kindergarten students will plan a code and have the KIBO robot execute it using the command blocks provided.

Texas (Technology TEKS)

(4) Critical thinking, problem solving, and decision-making. The student applies critical-thinking skills to solve problems, guide research, and evaluate projects using digital tools and resources. The student is expected to:(A) identify what is known and unknown and what needs to be known regarding a problem and explain the steps to solve the problem; (C) evaluate products prior to final submission; and(D) collect, analyze, and represent data using tools such as word processing, spreadsheets, graphic organizers, charts, multimedia, simulations, models, and programming languages.

Student Activity

Students will be provided vocabulary words: coding, programming, language, commands

4 KIBO Stations will be provided for students:

-KIBO with motion blocks

-KIBO with Light On blocks

-KIBO with Sound Record/Play Back Module

-KIBO with motion blocks, along with Spin and Sing blocks

Students will be shown KIBO and how it uses infrared to scan blocks for commands. They will learn and understand various block commands and explore others at the stations. Students will plan a program for KIBO to perform and scan the blocks in order to execute their program. Each student will enter a program at each station.

Instructional Delivery

Teacher will have command blocks and one KIBO at central location for students to get instruction as a whole group. Extra KIBO robots will be placed in various areas of the room. Teacher will introduce vocabulary words and discuss as a whole group. Teacher will model how to scan blocks for KIBO to record and use triangle to execute. Safety rules and the use of KIBO will also be discussed as a group. Teacher will monitor and assist students as they program KIBO using the various blocks.

Closure/Evaluation

Teacher Observation