CAISL
Carlucci American International School of Lisbon

GRADE 4 INFORMATION TECHNOLOGY FRAMEWORK

CONTENTS

OVERVIEW: 1

EXPECTATIONS: 1

CODING COMMANDS USED: 1

ACTIVITIES: 2

RESOURCES: 2

PERFORMANCE INDICATORS: 3

CREATIVITY AND INNOVATION ..... **Error! Bookmark not defined.**

CRITICAL THINKING, PROBLEM SOLVING & DECISION MAKING 3

OVERVIEW:

Technology is an integral part of the Fourth Grade Curriculum. Using a Programming Language, they learn geometry concepts by giving commands to move and change directions, while constructing polygons, figures and create patterns of multiple color shapes. Students design, build, program robots and use a circuit board. They develop solutions to proposed projects while working in teams. Basic operations and concepts are covered during class time.

EXPECTATIONS:

The student will be able to:

Interact with peers to play group activities and develop problem-solving, critical-thinking, and decision-making skills.

Construct polygons, simple figures and patterns using a programming language

Use concepts of procedure and sub-procedure.

CODING COMMANDS USED:

FD (Forward)
BK (Back)
LT (Left)
RT (Right)
TO …END (Procedure)
Repeat […]
HOME

CS (Clear Screen)
CT (Clear Text)
PU (Penup)
PD (Pendown)
PE (Penerase)
SETPC (Setpencolor)
FILL

ACTIVITIES:

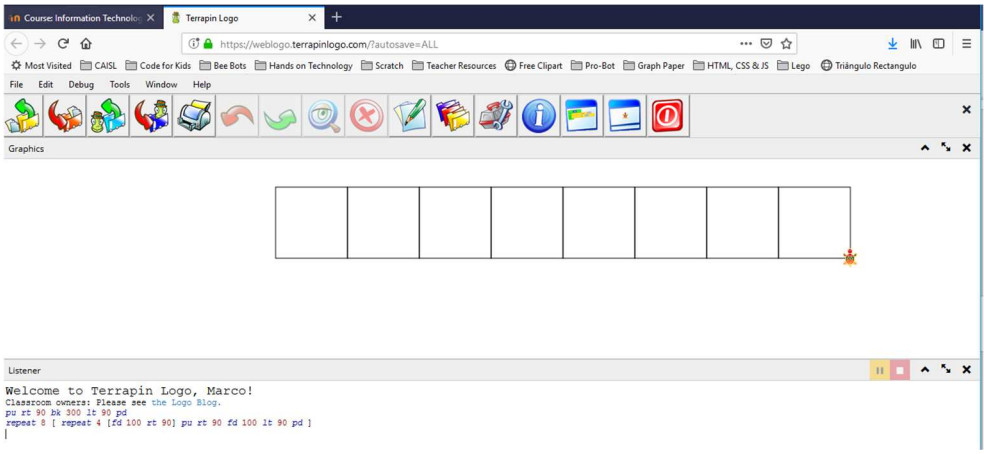
Weblogo Worksheets – Square Letters & Numbers, Simple & Custom Shapes, Primary & Secondary Colors, Regular Polygons, Patterns, Figures with Polygons.

Makey Makey – Piano, Simple Games Interface.

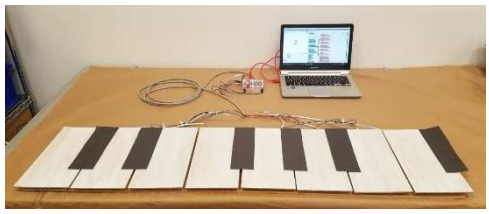
Robo Wunderkind – Projects (Meet Robo, Robo is a Synthesizer, Robo is a Colorful Night Light, Robo is a Fan, Robo is a Car, Robo Travels to The Toy Town, Robo Looks Around, Robo is a Guard, Robo is a Pet, What is Your Robo?).

RESOURCES:

Weblogo



Makey-Makey



Robo Wunderkind

PERFORMANCE INDICATORS:

CREATIVITY AND INNOVATION

Design and build robots using modules. DOK 2 E

CRITICAL THINKING, PROBLEM SOLVING & DECISION MAKING

Learn geometry concepts using Terrapin Logo Programming Language, give commands to move in distances and turns in degrees, while constructing polygons and figures. DOK 3

Use logo programming language to create patterns of multiple color shapes. DOK 3

Create custom commands using the Terrapin Logo procedure concept. DOK 3

Program a robot to complete a project given by the teacher. DOK 2 E

Use motion, distance, light, color sensors in a context given by the teacher. DOK 3

Use Bluetooth connection to control the robot. DOK 1