Kodu Lessons Overview

This curriculum consists of five, one hour experiences with Kodu Game Lab and is targeted to those interested in learning about programe a Touch version of Kodu. The lessons should be performed one-on-one (ex: parent and child) or in a small group (teacher and 5 kids). Each lesson is broken into chunks with a break in the middle of each lesson. Feel free to split up and perform a lesson over two days.

The lessons are written for a touch version of Kodu Game Lab which is an automatically recognized interface when Kodu is run on a touch-enabled device, such as a Microsoft Surface.

Download Kodu Game Lab at http://www.kodugamelab.com/

Tips for working with young children:

- Point to where you want kids to touch.
- Guide kids’ hands as they click, hold, or drag.
- Model double-clicking speed and have them practice to get comfortable.
- Constantly ask questions which promote understanding of the “why” and “how”, not just the “what” (action) they are doing. Ask questions which elicit their curiosity. For example:
  - When do we want Kodu to eat apples?
  - Why won’t Kodu eat this apple?
  - Do we need to change the color of the tree?
Lesson 1: Intro to Kodu Touch

Duration: One hour

Standards:

- Use standard input and output devices to successfully operate computers and related technologies. 
  \(\text{(CSTA L1:3.CD.1)}\)
- Work cooperatively and collaboratively with peers, teachers, and others using technology. 
  \(\text{(CSTA L1:3.CL.2)}\)

Objectives: Kids will be able to…

- Navigate the Kodu world by using their fingers to zoom in/out, orbit, drag, and pitch the camera.
- Choose the appropriate tool for a task by selecting to either paint terrain or place an object.
- Traverse a hierarchy of menu options to specify the action of a tool.

Teacher Preparation: Kodu Classroom Kit and Videos at [http://www.kodugamelab.com/About](http://www.kodugamelab.com/About)

Lesson Sequence:

Activator: Kodu Nursery Rhyme (10 minutes)

- Sing the Kodu nursery rhyme to the tune of Mary had a Little Lamb.

  Mary Had a Little Kodu

  Mary had a little Kodu,  
  little Kodu, little Kodu.  
  Mary had a little Kodu,  
  Who likes to eat apples.  \(\text{\textit{\text{\textit{\text{\textit{(make motion as if gobbling apples)\}}}}}}\)  
  And everywhere the apples were, \(\text{\textit{\text{\textit{\text{(act as if looking for something)\}}}}\)\)  
  apples were, apples were.  
  And everywhere the apples were  
  The Kodu was sure to go.  \(\text{\textit{\text{\textit{\text{\textit{(float around like a Kodu)\}}}}}}\)  
  It bumps into the red apples, \(\text{\textit{\text{\textit{\text{(kids can lightly bump into each other)\}}}}\)\)  
  red apples, red apples.  
  It bumps into the red apples,  
  and then it eats them up.  \(\text{\textit{\text{\textit{\text{(make motion as if gobbling apples)\}}}}\)\)  
  It doesn’t like the green apples, \(\text{\textit{\text{\textit{\text{(make thumbs down motion)\}}}}\)\)  
  green apples, green apples.  
  It doesn’t like the green apples,  
  It says, “Yuck, yuck, yuck, yuck!”  

  Why does the Kodu act this way?  
  act this way? act this way?  
  Why does the Kodu act this way?  
  Because you told it so!  \(\text{\textit{\text{\textit{\text{(repeat verse twice)\}}}}\)\)
Navigating Kodu’s World (20 minutes)

- Stretch your fingers:
  - Tell students to extend and contract their index finger repeatedly.

  “Wiggle all of your fingers.”
  “Now stick out your pointy finger. Open and close it.”

- Guide them through the following actions by pointing where to click.
  - Open up Kodu Game Lab
  - Select New World

- Moving the World: Drag
  - Have students extend two fingers (their index and middle finger), touch the world, and move it side to side.
  - Tip: It is easier if their two fingers are a bit spread apart. Two fingers can sometimes register as one finger when close together.

- Changing Perspective: Pitch the Camera
  - Have students place one finger on the world and move it around to see the result.
  - Have them practice with changing the camera’s perspective from a bird’s eye view to a side-view.
• Spinning the World Around: Orbit the Camera
  o Have students use two fingers to orbit the camera so that the land looks like it is spinning.
  o Once again, the two fingers being used should be spread apart.

• Zoom In/Out
  o Without the computer, have students practice using their thumb and index finger to make the following maneuvers.
    ▪ Spread to zoom in.
    ▪ Pinch to zoom out.
  o You can liken it to a bird’s mouth opening and closing.
    ▪ Open wide to eat a big worm (Zoom in)
    ▪ Close the mouth to eat a small worm (Zoom out)

• Practice the actions until students are comfortable manipulating the world

Stretch Break (10 minutes)

• “Stand up.”
• “Reach to the sky as high as you can!”
• “Now get as low as you can.”
• “Jump up.”
• “Wiggle your body…(time passes)… then freeze!”

Painting Terrain (15 minutes)

• Select the paint tool.
• Have students click and slowly, drag their finger around to create more terrain.
• Note: Younger students have trouble keeping applying the right pressure to keep their finger pressed to the screen, yet moving.
• Have them practice navigating the world as they paint terrain.
• They should save the world as “New World” or rename it to “My World”
Review (5 minutes)

- Have students raise their hands so that you can see them.
- Have them make the accompanying finger motions to perform the following camera maneuvers:
  - Make the world bigger/smaller (Spread and pinch with index finger and thumb)
  - Spin the world (One-finger pitch or two-finger orbit)
  - Make the world go sideways (One-finger pitch)
  - Move the world to the left and right (Two-finger drag)