

- □ Programming software for kids (above 8)
  - ■Young students can learn the concept of programming easily
- MIT Media Lab -developed by Lifelong Kindergarten Group-

#### Characteristics

- Can use Mongolian Language
- Many ready-made material is contained
- Teacher can use their own material
- User-friendly

```
хэзээ Д товшигдвол
х: -156 у: -76 цэгт оч
ЗО удаа давта
дараах «мсгел
10 алхамаар яв
```

### WHAT IS SCRATCH ??



```
when clicked

go to x: -158 y: -89

broadcast bg1 v

move 50 steps

play sound Meow v

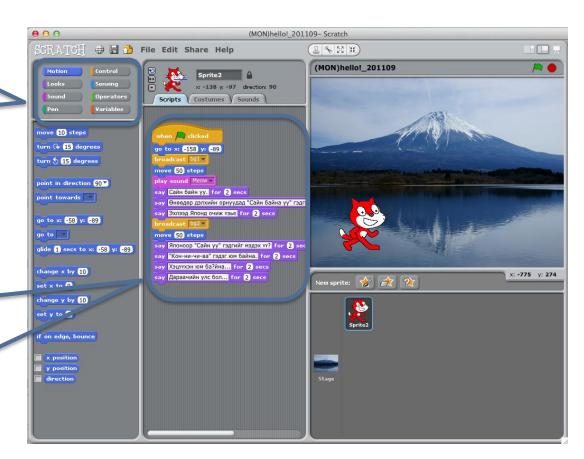
say Сайн байн уу. for 2 secs

say Өнөөдөр дэлхийн орнуудад "Сайн байна уу" гэдг

say Эхлээд Японд очиж үзье for 2 secs

broadcast bg2 v

move 50 steps
```



Combine the blocks to control the character, change the Background image...etc

#### INTERFACE OF SCRATCH

#### ■ illustration

Animals (72chracters), Fantasy (43chracters), Letters(0~10 10chracters), People (99chracters), Things (37chracters), Transportation (19chracters)



READY-MADE MATERIALS (ILLUSTRATION)

- Background illustrations/photos
- Indoors (12chracters), Nature (20chracters), Outdoors (34chracters),

Sorts (7chracters)





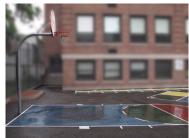












READY-MADE MATERIALS (BACKGROUND PICTURE)

- Sound
- Music instrument (80characters), Sound Effect (31characters)
- Animal(16characters), Effects(15characters), Human(17characters), Instruments (11characters), Music Loops (23characters), Percussion(6characters), Vocals(12characters)
- Can record with microphone





# SOUND MATERIALS INCLUDED

#### **Objective**

- To introduce the FOSS software to improve the quality of education and to also introduce how to use it.
  - Introduced "Scratch" to primary school teachers & conducted training

#### Manual

- Developed "Scratch basic manual" (33pages)
- Explained how to use Scratch & how to create teaching material Scratch Teacher Training

Target site: Bayankhongor, DornoGobi, TuV

Participants: 30 Primary school teachers

Training Outline: How to use the Scratch basic functions

How to make teaching material



### SCRATCH TRAINING

Sample of Scratch Teaching Material

**Subject: Physical Education** 

Objective: To show how to move the body, student will follow the

material

Idea was came from : Dornogobi teachers

## SCRATCH TEACHING MATERIAL (TEACHERS' IDEA)

Sample of Scratch Teaching Material

Subject: Human & Environment, Math

Objective: To practice counting number with animation

Idea was came from: Tuv teachers

## SCRATCH TEACHING MATERIAL (TEACHERS' IDEA)

Objectives: To monitor the outcomes of Scratch Training

Target site: Bayankhongor, DornoGobi, Tuv

Participants: primary school teachers

Number of Scratch teaching materials:

13 materials (Bayankhongor, DOrnoGobi), 15 materials (Tuv)

- Movie:
  - one-way communication
  - Scripts vs narration
  - Adjusted timing of scripts for students' reading speed
- Interactive tool
  - two-way communication
  - Expected responses from children

# SCRATCH COMPETITION

Objectives: To explain the their unique history and culture with poem

Subject : Civil education

JASID (Japan Society for International Development) annual conference
Date: 2 <sup>nd</sup> June
Location: Yokohama National University
Objective: To show the result of Scratch analysis

#### **JASID PRESENTATION**