

# Enhancing the *Speak Up! Suite of Voice Powered Games*

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## Problem

80% of the world's deaf population lives in the developing world, where they often lack the support necessary to lead independent lives. In India especially, the Deaf community faces cultural stigmas surrounding communication: the notion that they are “dumb”, the scarcity of speech therapists, and the lack of acceptance of sign language.

## Solution

A technological tool that allows hearing impaired children to understand, visualize, and explore their voices. This tool must be usable by students with a wide variety of vocal capabilities, it cannot impose a curriculum or phonetic system onto the students, and it must require little technical skills to use.

## Our Project

We are developing *Speak Up!*, a suite of voice-powered games. The suite includes games where: student voice propels a vehicle forward, students vary their volume to move a bird up and down, and student voice gradually reveals a flashcard. The games have been in use at a school for the deaf in India for 2 years, and we propose conducting fieldwork to understand their strengths and shortcomings, and further improve them.



Fig. 1: Teachers using the *Speak Up!* sound games during their speech therapy classes.

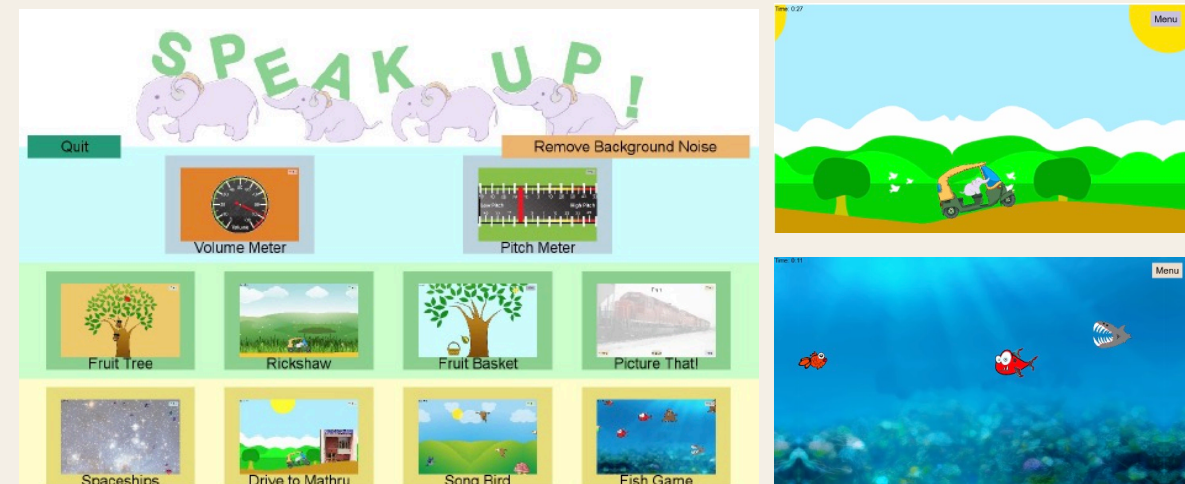


Fig. 2: The *Speak Up!* menu, the *Rickshaw Game*, and the *Fish Game*.