

## KIDS

# Digital Puppetry

A new technique brings a Jim Henson touch to a kids' science show

The character Sid the Science Kid, star of a new show of the same name on PBS, was created to introduce preschoolers to concepts such as estimates and data. His other purpose: saving time in the animation process.

The latest spawn from the Jim Henson Company, Sid is brought to life by a new process that combines puppetry with motion-capture technology. It all comes together on a soundstage on the Henson lot in Hollywood. As puppeteer Drew Massey voices Sid's lines, his hands manipulate a mechanical rig linked to computer software, which controls a digital image of Sid's face on a screen.

Simultaneously, Misty Rosas, a performer wearing a motion-capture bodysuit, acts out Sid's body movements on the set, walking, dancing and engaging with other actors playing Sid's co-stars, who are animated in the same fashion.

Computers stitch these dual performances—faces and bodies—together on the spot. After some postproduction tweaks, such as editing, shading and refining hair movement, the show is ready to air.

This "digital puppetry" process enables the Henson studio to make an episode nearly in real time, in about as long as it takes to shoot a live-action sitcom. By comparison, it can take several months to create an episode of more traditional

animation using standard methods.

"This is instant gratification. You get spontaneous acting," says Mr. Massey.

Besides saving time, digital puppetry also allows for spontaneous script changes and multiple takes. "It is 3-D animation, but it has the looseness of 'The Muppets.' It's been puppeteered in a live environment with a director coordinating a scene from top to bottom," says Brian Henson, son of the late Jim Henson and co-chief executive, with his sister Lisa, of the company.

But the technology has its limitations. Because it's based on a live performance, Mr. Mas-

sey says, the puppetry-style lip sync may look imprecise to viewers used to Pixar verisimilitude.

Henson is producing 40 episodes of "Sid the Science Kid," which premieres on Sept. 1 on the morning PBS Kids block on TV and online at pbskids.org/sid.

The show aims to introduce preschool-age children to science topics. With lighthearted questions such as "Why does my banana get squishy?" and "Why is it that my shoes are shrinking?" Sid takes a "Seinfeld"-ian approach to the issues of daily life. He even has a prop: a toy microphone with a push-button laugh track.

—John Jurgensen



Above, Sid the Science Kid; right, performer Misty Rosas.

