Videos for science education: an old story with Amazonian colors

Torres, JB., Torres Neto, JB., Oliveira, FRR., Diniz, CG., Trévia, N., Santos Filho, C. and Diniz, CWP.

Universidade Federal do Pará

Video has long been recognized as providing an important resource within science education. As a resource for research, and more specifically within qualitative studies of science, video has proved less pervasive, despite its obvious advantages. Documentary format have been used frequently in attempt to bring to classroom National Geographic series translated to Portuguese. In the present work we developed a different approach to produce videos for science education dedicated to public school teachers and students of the Amazon region where images, sounds, context, culture, music, fauna, flora, emotion and stories were captured in loco and reflect both the reality and the Amazonian imaginary. Fifteen minutes of biology of the locomotor and sensory systems of a snake (Boa constrictor) is presented pari passu with a dramatic sequence of images of capture, constriction, death and swallowing of a little mouse. Early images in the video present contextual scenes to generate a typical Amazonian atmosphere in a house farm on the river side banks after sunset, where an old woman tell stories to young people before dinner. It follows technical takes that explore details of the snake locomotor system based in animations dedicated to explain how scales, muscle and bones are articulated one each other to produce different kinds of movement. Labial pit organ, quadrate bone, Jacobson's organ and visual fields are also described and illustrated in order to explain how snake localizes and approaches the mouse by using electromagnetic radiation, odors and mechanical stimulus. The result is an exciting short movie that can be explored by teachers in many different ways. Evaluation of this approach is presently in course, but preliminary data reveals that student motivation may be the main reason to explain less pervasive of video in science education.

Finantial support: CNPq, CAPES, UFPA, FINEP/IBN-Net.