

Abstract

Matuk, C.F., Diamond, J., & Uttal, D.H. 2009. *Heroes, villains and viruses: How graphic narratives teach science*. Paper presented at the International Visual Literacy Association (IVLA2009). Chicago, IL. October 6-9, 2009.

Virology has come to figure prominently in our day-to-day lives such that a basic understanding of viruses and infection is necessary to make informed personal and family health decisions. Comic books have unique narrative and motivational properties that hold tremendous potential for such a public education effort. However, we know little of the process of interpreting graphic narratives, let alone of graphic narratives that illustrate complex processes such as viral infection and the immune response. Here, we present findings from interviews with four 13-year old readers of a graphic story created to educate and incite interest in concepts of virology. Through a rich microgenetic analysis, we illustrate how readers make sense of complicated biological processes through an interaction between their prior knowledge, and of various visual narrative elements in the comics genre. This research investigates when and how particular graphic storytelling devices may help or hinder understanding, and begins to describe components of literacy in reading science comics. Ultimately, this work informs the design and use of comics as entry-points into obscure and complicated scientific topics, and importantly, as objects to stimulate youths' interest for future learning.