Transmissions: Gone Viral

Transmissions: Gone Viral is a web-based comic book created by the New York Hall of Science that engages readers in science skills such as collecting, sorting and understanding evidence. Readers learn about West Nile virus, observe real scientific imagery, and discover the roles mosquitoes and birds play in disease transmission.

A trio of children set out to solve the mystery of dying crows in their neighborhood. Aided by scientific specialists, they gather evidence. Interactives embedded in the narrative engage readers in sorting evidence and finding patterns that may help solve the mystery.

MAP APP
Participants are invited to generate hypotheses by finding patterns and organizing evidence using clues from different locations in their neighborhood.

Design Challenge:
What elements of the Map App support participants in recognizing, using and questioning evidence?

Testing:
Participants noticed patterns in terms of quantity of clues (dots) such as water, birds and garbage at a single location. However, they did not readily compare clues across different locations, surmising that multiple factors could be killing the birds.

Design Solutions:
The characters pop up and offer clues to help the reader. These were rewritten to prompt the reader to compare different combinations of dots, notice patterns across locations, question their hypotheses, and consider alternate theories. Visually, the clues were also made more prominent.

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The Virus Game
The reader is a virus and needs to spread infection far and wide by the most efficient means possible. The player may choose a bird or mosquito as their host.

Design Challenge:
What elements of an interactive virus game engage participants and how does it support their understanding of how viruses spread?

Testing:
Participants found the game engaging, but were frustrated with the randomness of the location choices and applied situational causality to make sense of the game. Participants forgot that they were a virus inside vector hosts, but understood that the hosts were spreading the virus.

Design Solutions:
A number of features were added to emphasize the host/vector relationship and enhance gameplay including: less random location choices, a counter for spread of infection, displaying previous locations so players can track where they have been, a visual for the virus, two set colors to differentiate hosts, and a gameover option to make it more challenging.

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