

Coping with risks and crises through communication

Uses of science blogs on acute food risks and nuclear disasters
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Abstract

Science blogs are widely lauded as potentially powerful tools for risk and crisis communication, but many academic bloggers seem to use them merely for scholarly discussion. This study analyzes how two acute events, the Fukushima nuclear disaster and an E. coli epidemic in Germany, were covered by science bloggers and what reactions from readers they received. Readers' comments showed a strong need for interaction and discussion, which appeared most clear-cut on blogs that mediated events for a general audience. The complexity and tone of a blog post impact the readership, with more high-brow comments leading to a more academic discussion. Science bloggers can thus steer what role their posts should play during a crisis, and the analysis shows that some do this in a very responsible way.

Would it be possible to phase out nuclear energy?

Results

Style and presumed readership

- › Writing styles of blogs vary, can create barriers
- › Blog posts in everyday language encourage interaction with broad range of readers
- › Complex, scientific blog posts attract a more academic readership

Needs of the commenters

- Comments left by readers document
- › desire for adding information, sources on current events
 - › desire for giving own evaluation of events (esp. to political and academic blog posts)
 - › need for orientation
 - › gratefulness toward bloggers (esp. when blog post mediates complexity to lay readership)

Functions of science blogs

- › understanding crises
- › discussing with experts, asking questions
- › keeping each other up to date
- › evaluating protective measures

But also...

- › "virtual water cooler," experts discussing among themselves

Is it safe to drink sake?

Research questions

- › What role do science blogs play during acute crises?
- › Do blogs really help people understand and cope with complex situations?

Analysis

- 12 posts from science blogs dealing with
- › Fukushima nuclear disaster
- › 2011 E. coli epidemic in Germany
- 633 comments from readers of these posts

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How does pumping sea water into the reactor actually work?

Implications

Science blogs are sought during times of risk and crisis as

- › sources of information
 - › forums for exchange
 - › places to let off steam
- Through the angle and style of their posts, bloggers
- › attract different audiences
 - › what function their blog can fulfill during situations of crisis or acute risks

What is the energy efficiency if you relate the electric power to the fission energy of the fuel?