


# A Gift of Fire

Fourth edition  
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Chapter 7: pages 311-329

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## What We Will Cover

- Evaluating Information
- The “Digital Divide”
- Neo-Luddite Views of Computers, Technology, and Quality of Life
- Making Decisions About Technology

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## The Need for Responsible Judgment

- Expert information or ‘wisdom of the crowd’?
  - Daunting amount of information on the web, much of this information is not correct
  - Search engines are replacing librarians, but Web sites are ranked by popularity, not by expert evaluation
  - Wisdom of the crowd - ratings by public of Web site
  - If millions participate, the results will be useful

What constitutes an expert evaluation?

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## Wikipedia

- Written by volunteers, some posts are biased and not accurate
- Although anyone can write, most people do not
- Those that do typically are educated and experts

Have you experienced inaccuracies in your use of Wikipedia? If so, in what general topic?

*Corresponding page number:*

## Unreliable Information

- Wisdom of the crowd
  - Problems of unreliable information are not new
  - The Web magnifies the problems
  - Rating systems are easy to manipulate
- Vulnerable viewers
  - Less educated individuals
  - Children
- Recent issues
  - 2016 election fake news
  - Facebook responsibility discussion

Do you think that news distributors should be more responsible in filtering out fake news?

Are there steps that can be taken to make the population less vulnerable to false Web information?


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## Evaluating Information

### The Need for Responsible Judgment

- Abdicating responsibility
  - People willing to let computers do their thinking
  - Reliance on computer systems over human judgment may become institutionalized
  - Fear of having to defend your own judgment if something goes wrong


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## Computer Models

- How well do the modelers understand the underlying science or theory?
- Models necessarily involve assumptions and simplifications of reality.
- How closely do the results or predictions correspond with the results from physical experiments or real experience?

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## Models May Not Be Accurate

- We might not have complete knowledge of the system we are modeling.
- The data describing current conditions or characteristics may be incomplete or inaccurate.
- Computing power may be inadequate for the complexity of the model.
- It is difficult, if not impossible, to numerically quantify variables that represent human values and choices.

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