

Associated Colleges of the South - Technology Fellowship Report
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Overview

This project was designed to develop a multi-layered web-site to help educate students and others about a range of critical and skeptical thinking skills and various barriers to critical thinking about human behavior. Because of the abundance of critical and skeptical thinking websites available on the World Wide Web, the web-site essentially evolved into a type of multi-layered web-portal, albeit one more specific to critical thinking as it relates to the assessment of claims about human behavior and thought processes.

Methodology

For the development of the site I visited, read, and sorted through dozens, if not hundreds of web-sites, popular and scholarly articles and books related to critical thinking, skeptical thinking, scientific reasoning, and various sub-categories of each of these broader areas. Because virtually all of these sources have a variety of different aims, I selectively culled from these resources aspects most relevant to thinking critically about human behavior. While the site includes original material on these topics, in large part, the web-site brings together from a wide variety of sources information directly related to critical thinking/skeptical thinking about claims to knowledge about human behavior.

Description

The web-site has several higher-order links, many of which contain lower-level links. The main page contains a brief overview of the purpose of the site and how to navigate the site. From the main page, browsers may access several primary areas along with many sub-areas, as follows:

What is Critical Thinking and Why it is Important: A page that provides links to and various definitions of critical thinking and critical thinking dispositions. It also includes an area on why thinking critically about human behavior is important.

Barriers to Thinking Critically about Human Behavior: This area includes several sub-categories, all of which define, describe, and provide examples of various cognitive and affective hindrances to clear thinking about human behavior.

Sub-pages:

- *Biases, Heuristics, and other Cognitive Illusions:* (Examples include: Confirmation bias, Availability bias, Representative heuristic, Illusory correlation, Illusions of control, and many more – each contains examples specific to human behavior and thought processes.)
- *More Limitations to Thinking Critically about Human Behavior:* (This page includes other barriers to CT that are not easily categorized. Examples include the inappropriate use of personal experience and testimonials as a guide to reasoning about human

behavior; coincidence and statistical/probabilistic reasoning, postmodernism as it relates to the science of human behavior, and many more.)

- *Fallacies of Argumentation*: (This page includes links to excellent web-sites devoted to the description of a host of informal logical fallacies. Most sites also include activities.)

Critical Thinking about Human Behavior: This section includes a variety of sub-topics related to how to evaluate claims to knowledge about human behavior and how to recognize science and pseudoscience.

Sub-pages:

- *Evaluating Claims about Human Behavior*: (Includes articles that offer guidelines for thinking critically about human behavior.)
- *Scientific Thinking*: (Includes information and links about scientific thinking and how to use it to evaluate claims to knowledge about human behavior.)
- *Pseudoscience and Other Myths of Human Behavior*: (This area includes an abundance of links to information about various myths of human behavior and pseudoscientific topics such as astrology; certain alternative medicines/practices; UFOs; 10% Brain Myth; Psychics; OBEs; Communicating with the dead, and more. It also includes information about how to recognize pseudoscience and distinguish good theories from bad ones.)
- *Controversial Issues in Psychology*: (This area includes a sample of controversial topics related to human behavior including: False/recovered memory; facilitated communication, dissociative identity disorder, the Rorschach; Is spanking an effective means of behavior control?; statistical versus clinical prediction; Evolution/Creationism and Intelligent Design debate, etc...)

Resources for Thinking Critically about Human Behavior: This area consists of a large number of categorized links to books, articles, and web-sites related to critical thinking and behavior.

Critical Thinking Assessment: This brief page includes links to a few sites that contain information on instruments used to assess critical thinking.

Critical Thinking Conferences: A brief page that provides links to national and international conferences devoted to critical thinking, broadly defined.

Assessment

Over a two-semester period I assessed the usage and utility of the site by asking a series of questions of my students and those students of two colleagues in several courses (e.g., Introduction to Psychology, Research Methods). I asked students in these courses to answer a series of questions using a 7-point Likert scale, where higher numbers indicate more usage and higher ratings of favorability and utility. A sample of questions included (with mean responses in parentheses):

- Did you use the CT web-site during the course? (Answers ranged from “Not at all” to “Very often”) – ($M = 5.88$)
- The navigation of the site was _____. (“Excellent” to “Very poor” – Reversed scored) – ($M = 5.06$)
- How useful did you find the site for this course? (“Not at all useful” to “Very useful”) - ($M = 5.54$)
- Information on the site fostered my ability to think critically. (“Strongly disagree” to “Strongly agree”) – ($M = 6.29$).
- The site helped me to think _____ critically about human behavior. (From “Not at all more” to “Substantially more”) - ($M = 6.16$)
- Which area(s) of the site did you find most useful? (Each area was listed and respondents were free to select as many as they wanted). The highest rated sections were the “Barriers” section – specifically the first two sub-areas” and the “Thinking Critically about Human Behavior” section - specifically the last three sub-areas). The data is available upon request.

I also included several narrative feedback questions and am in the process of incorporating that feedback into the site. Finally, I have found consultation (which is on-going) with various colleagues around the country for their advice on the site invaluable.

My assessment was not intended to be a scientific examination of the site, but the feedback has been useful in shaping reorganizations of the site as well as additions and deletions to the site. Perhaps a more systematic examination using methodologically sound approaches will be an avenue for future consideration.

This project is ongoing as many examples and areas continue to be added (and deleted) from the project site based on availability of updated information and refinement based on feedback. Initially the site was available on the WWW (<http://panther.bsc.edu/~spitts/ct.html>), but for a technical, logistical, and other reasons had to be relocated to the Blackboard portal system. (Guest access can be arranged by contacting me at spitts@bsc.edu).

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