Strengthening Students' Critical Thinking Skills with Research-Focused Assignments

Melissa Mallon, Assistant Professor & Coordinator of Library Instruction

Wichita State University Libraries

WICHITA STATE UNIVERSITY · UNIVERSITY LIBRARIES

Research + Critical Thinking

- The amount of resources available requires 21st century students to incorporate information from a variety of sources and evaluate for relevance & credibility

- Students with strong research and evaluation skills demonstrate a mastery of problem solving & analytical thinking desired by employers

Tips for Assignment Design

- Collaborate with librarians to tie library research instruction and assignments with course learning outcomes

- Set clear expectations for assignments and level of critical thinking or analysis required

- Design assignments around fundamental & transferable skills such as distinguishing between popular & scholarly sources, using information ethically, or evaluating information found on the web

- Encourage problem solving and communication among students

- Update research assignments as library resources change

Creative Commons photo courtesy of hebedesign on Flickr

- Critical thinking skills can be hard to measure; use creative solutions to assess students on their ability to synthesize information from a variety of sources and explore alternative concepts for presenting information

Discipline-Specific Research Assignments

- **Health Professions**
  - Compare/contrast Internet vs. medical databases for research

- **Engineering**
  - Promote thoughtful questioning (e.g. "How could you modify the program to make it more successful?")

- **Business**
  - Create case studies & analyze in groups
  - Analyze company financial statements over a 10 year period

- **Sciences**
  - Evaluate scientific claims

- **Fine Arts**
  - Research a sculpture's lifecycle

Creative Commons photo courtesy of brightening on Flickr

- **Humanities**
  - Develop objections to key arguments
  - Research & create posters on different viewpoints of controversial topics in literature or history

- **Social Sciences**
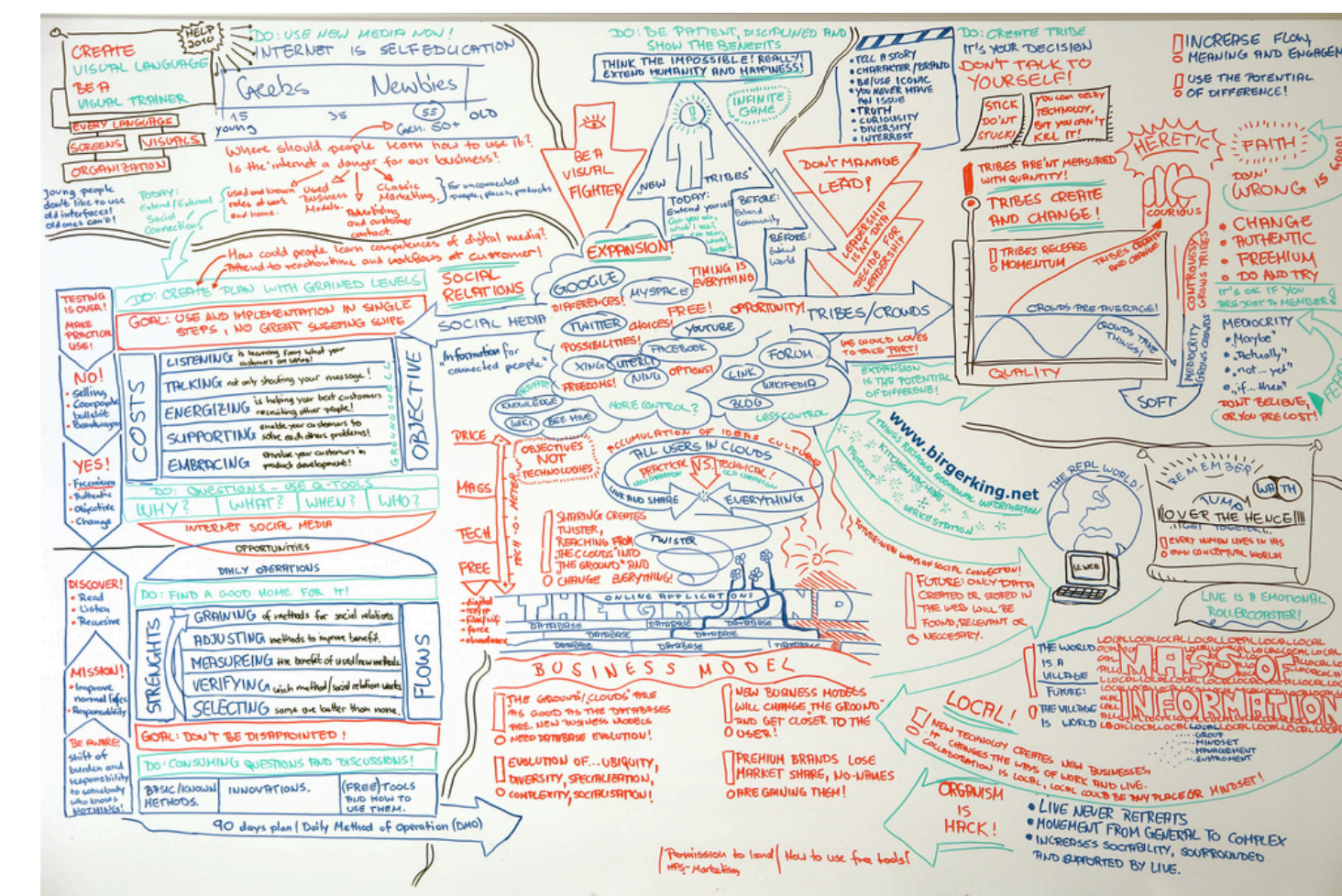 - Evaluative annotated bibliographies
  - Write a "letter to the editor" of a disciplinary journal

- **All Disciplines**
  - Research journals/logs
  - Read an editorial & find facts to support it
  - Check the accuracy of citations & track them down in the library

Assessment Tools

- Peer and self-assessments

- Evaluate student portfolios

- Standardized tests (ex. ETS Proficiency Profile, Watson-Glaser Critical Thinking Test or California Critical Thinking Skills Test)

- Capstone course reflections

- Rubrics

Creative Commons photo courtesy of Krissy.Venosdale on Flickr

Rubric Examples