

Problem Solving

Theories/Models/Bodies of Research:

1. Bransford, J. D., Brown, A. L., Cocking, R. R., Donovan, M. S., & Pellegrino, J. W. (Eds.). (2000). **How people learn: Brain, mind, experience, and school.** (Expanded ed.). Washington, D.C.: National Academy Press.
2. De Bono, E. (1970). **Lateral thinking.** New York: Harper & Row.
3. Fascione, P. A. (1990). *Executive summary of **critical thinking**: A statement of expert consensus for purposes of educational assessment and instruction – “The Delphi Report.”* Retrieved from <http://www.insightassessment.com/9dex.html>
4. Halpern, D. F. (1996). *Thought and knowledge: An introduction to **critical thinking*** (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
5. King, P. M., & Kitchener, K. S. (1994). *Developing **reflective judgment**: Understanding and promoting intellectual growth and critical thinking in adolescents and adults.* San Francisco, CA: Jossey-Bass.
6. Kuhn, D., Katz, J.B., & Dean, D., Jr. (2004). Developing **reasoning.** *Thinking and Reasoning, 10*(2), 197-219.
7. Langer, E.J. (1997). *The power of **mindful learning.*** Cambridge, MA: Perseus Books.
8. Mayer, R.E. (1992). **Thinking, problem solving, cognition** (2nd ed.). New York: W H Freeman/Times Books/ Henry Holt & Co.
9. Mentkowski, M., & Associates. (2000). **Learning that lasts: Integrating learning, development, and performance in college and beyond.** San Francisco, CA: Jossey-Bass.
10. Newell, A. & Simon, H.A. (1972). **Human problem solving.** Englewood Cliffs, NJ: Prentice Hall.
11. Paul, R. & Elder, L. model of **critical thinking** <http://www.criticalthinking.org/>
12. Perry, W. G. (1999). *Forms of **intellectual and ethical development** in the college years: A scheme.* New York: Holt, Rinehart and Winston. (Original work published in 1968)
13. Sternberg, R. J. (1997). **Successful intelligence: How practical and creative intelligence determine success in life.** New York: Plume.

Methods/Measures/Tools:

1. **AAC&U Problem-Solving VALUE Meta-rubric** | <http://www.aacu.org/value/metarubrics.cfm>
2. **California Critical Thinking Skills Test (CCTST)** | <http://www.insightassessment.com/9test-cctst2k.html>
3. **Collegiate Learning Assessment (CLA)** | http://www.cae.org/content/pro_collegiate.htm
4. **Critical Thinking Assessment Test (CAT)** | <http://www.tntech.edu/cat/home/>

5. **Defining Issues Test (DIT)**
<http://www.centerforthestudyofethicaldevelopment.net/Instruments,%20Services,%20and%20Materials.htm>
<http://www.liberalarts.wabash.edu/storage/assessment-instruments/dit2.pdf> (direct link to instrument)
6. **Need for Cognition Scale** | <http://www.liberalarts.wabash.edu/ncs/>
7. **Perry Interview** | <http://www.perrynetwork.org/interviews.html>
8. **Problem-Solving Analysis Protocol (P-SAP)**
Steinke, P., & Fitch, P. (2007b). How to measure problem-solving ability: The problem-solving analysis protocol. *Toolkit*, 5(3), 5. Retrieved from http://www.niu.edu/assessment/Toolkit/vol5_ish3.pdf
<http://departments.central.edu/psychology/faculty/psap/>
9. **Problem-Solving Interview**
Eyler, J., & Giles, D. E., Jr. (2002). Beyond surveys: Using the problem-solving interview to assess the impact of service-learning on understanding and critical thinking. In A. Furco & S. H. Billig, *Service-learning: The essence of the pedagogy* (pp. 147-160). Greenwich, CT: Information Age Publishing.
10. **Problem-Solving Inventory (PSI)**
Heppner, P.P. (1988). *The Problem-Solving Inventory (PSI): Manual*. Palo Alto, CA: Consulting Psychologists Press.
11. **Reflective Judgment Interview (RJI)**
<http://www.umich.edu/~refjudg/reflectivejudgmentinterview.html>
12. **Scale of Intellectual Development**
Erwin, T. D. (1983). The scale of intellectual development: Measuring Perry's scheme. *Journal of College Student Development*, 24, 6-12.
13. **Steps for Better Thinking** | <http://www.wolcottlynch.com/>
14. **Think Aloud Protocols** | <http://www.hu.mtu.edu/~njcarpen/hu3120/pdfs/thinkaloud.pdf>
15. **Watson-Glaser Critical Thinking Appraisal**
<http://www.pearsonassessments.com/HAIWEB/Cultures/en-us/Productdetail.htm?Pid=015-8191-013>