

## Jacqueline P. Leighton's Précis

### *Education*

- Post-doctorate, 2001, Dept. of Psychology, Yale University
- Ph.D., 1999, Dept. of Psychology, University of Alberta
- M.Ed., 1995, Dept. of Educational Psychology, University of Alberta
- B.A. Honours, 1993, Dept. of Psychology, University of Alberta

### *Research Interests*

- Higher-level cognition and assessment, especially in examining how to both measure and evaluate students' reasoning and problem solving accurately and fairly; construction of tasks and tests that validly measure higher-level thinking and learning; research methods and statistics.

### *Representative Presentations at National/International Conferences*

- Leighton, J. P., & Gierl, M. J., & Hunka, S. (2002, April). *The attribute hierarchy model: An approach for integrating cognitive theory with assessment practice*. Paper presented at the annual meeting of the National Council on Measurement in Education. New Orleans, LA.
- Leighton, J.P., & Carbonaro, M. (2002, April). *Learning Outside the Box: Using Cognitive Models to Understand Student's Thinking About Hypothesis Testing and Forming Concepts*. Paper presented at the Annual meeting of the American Educational Research Association. New Orleans, LA.
- Leighton, J.P. (2001, April). *An Analysis of Students' Hypothesis Testing Skills*. Paper presented at the Annual meeting of the American Educational Research Association. Seattle, Washington.

### *Representative Publications*

- Leighton, J.P. & Bisanz, G.L. (in press). Children's and Adults' Knowledge and Models of Reasoning About the Ozone Layer and Its Depletion. *International Journal of Science Education*.
- Leighton, J. P., & Sternberg, R. J. (in press.). Reasoning and problem solving. In A. F. Healy & R. W. Proctor (Eds.), *Handbook of Experimental Psychology* (pp. 000-000). Volume 4 in I. B. Weiner (Editor-in-Chief) *Handbook of psychology*. New York: Wiley.
- Leighton, J. P., & Dawson, M. R. W. (2001). A Parallel Processing Model of Wason's Card Selection Task. *Cognitive Systems Research*, 2-3, 207-231.