

Some General Literature on Conceptual Change

- Chi, M. T. H., Slotta, J. D., & de Leeuw, J. (1994). From things to processes: A theory of conceptual change for learning science concepts. *Learning and Instruction*, 4 (1), 27 – 43.
- Chinn, C. A. & Brewer, W. F. (1993). The role of anomalous data in knowledge acquisition: A theoretical framework and implications for science education. *Review of Educational Research*, 63, 1 – 49.
- diSessa, A. (1993). Towards an epistemology of physics. *Cognition and Instruction*, 10, 105 – 225.
- Dole, J. A. & Sinatra, G. M. (1998). Reconceptualizing change in the cognitive construction of knowledge. *Educational Psychologist*, 33, 109 – 128.
- Duit, R., & Treagust, D. F. (2003). Conceptual change: A powerful framework for improving science teaching and learning. *International Journal of Science Education*, 25, 671 – 688.
- Eybe, H. & Schmid, H.-J. (2001). Quality criteria and exemplary papers in chemistry education research. *International Journal of Science Education*, 23 (2), 209 – 225.
- Gopal, H., Kleinsmidt, J., Case, J., & Musonge, P. (2004). An investigation of tertiary students' understanding of evaporation, condensation and vapour pressure. *International Journal of Science Education*, 26, 1597 – 1620.
- Limón, M. & Mason, L. (Eds.). (2002). *Reconsidering Conceptual Change: Issues in Theory and Practice*. Amsterdam: Kluwer.
- Palmer, D. (2005). A motivational view of constructivist-informed teaching. *International Journal of Science Education*, 27, 1853 – 1881.
- Pintrich, P. R., Marx, R. W., & Boyle, R. A. (1993). Beyond cold conceptual change: The role of motivational beliefs and classroom contextual factors in the process of conceptual change. *Review of Educational Research*, 63, 167 – 199.
- Piquette, J. S. & Heikkinen, H. W. (2005). Strategies reported used by instructors to address student alternate conceptions in chemical equilibrium. *Journal of Research in Science Teaching*, 42, 1112 – 1134.
- Posner, G. J., Strike, K. A., Hewson, P. W., & Gertzog, W. A. (1982). Accommodation of a scientific conception: Towards a theory of conceptual change. *Science Education*, 66 (2), 211 – 227.
- Schnotz, W. & Preub, A. (1999). Task-dependent construction of mental models as a basis for conceptual change. In W. Schnotz, S. Vosniadou & M. Carretero (Eds.). *New Perspectives on Conceptual Change* (pp. 193 – 222). Amsterdam: Pergamon.
- Sinatra, G. M. & Pintrich, P. R. (Eds.). (2003). *Intentional Conceptual Change*. Mahwah, NJ: Erlbaum.
- Stathopoulou, C. & Vosniadou, S. (2006 – in press). Exploring the relationship between physics-related epistemological beliefs and physics understanding. *Contemporary Educational Psychology*.
- Strike, K. A. & Posner, G. J. (1992). A revisionist theory of conceptual change. In R. A. Duschl & R. J. Hamilton (Eds.). *Philosophy of Science, Cognitive Psychology, and Educational Theory and Practice* (pp. 147 – 176). Albany, NY: SUNY Press.
- Tyson, L. M., Venville, G. J., Harrison, A. G., & Treagust, D. F. (1997). A multidimensional framework for interpreting conceptual change events in the classroom. *Science Education*, 81, 387 – 404.
- Vosniadou, S. (1994). Capturing and modelling the process of conceptual change. *Learning and Instruction*, 4, 45 – 69.
- Vosniadou, S., Ioannides, C., Dimitrakopoulou, A. & Papademetriou, E. (2001). Designing learning environments to promote conceptual change in science. *Learning and Instruction*, 11, 381 – 419.

NOTE: A review of some of much of this literature will be made available through the Education Information section of the ACELL website (<http://acell.chem.usyd.edu.au>) after I return to Australia on August 19. If you want to see it sooner, send an email to me (Justin Read) at j.read@chem.usyd.edu.au