

This is a bibliography accreted over years for many reasons. It is not and never will be *complete*.

Misconceptions

- Caramazza, A., McCloskey, M. and Green, B. (1981).
Naive beliefs in sophisticated subjects: Misconceptions about trajectories of objects. *Cognition*, 9:117-123.
- Collins, A. (1985).
Component models of physical systems. In *Proceedings of the Seventh Annual Conference of the Cognitive Science Society*, pages 80-89, Irvine, California.
- Dahlgren, L.O. and Marton, F. (1978).
Student conceptions of subject matter. *Studies in Higher Education*, 3(7):25-35.
- Doran, R.L. (1972).
Misconceptions of selected science concepts held by elementary school students. *Journal of Research in Science Teaching*, 9:127-137.
- Fung, P., du Boulay, B. and Elsom-Cook, M. (1987b).
An initial taxonomy of novices' misconceptions of the prolog interpreter. CITE Report 27, Centre for Information Technology in Education, Institute for Educational Technology, The Open University.
- Fung, P., Brayshaw, M., du Boulay, B. and Elsom-Cook, M. (1990).
Towards a taxonomy of novices' misconceptions of the prolog interpreter. *Instructional Science*, 19(4/5):311-336.
- Garnett, P. J. (1992).
Conceptual difficulties experienced by senior high school students of electrochemistry: Electric circuits and oxidation-reduction equations. *Journal of Research in Science Teaching*, 29(2):121-42.
- Helm, H. (1980).
Misconceptions in physics amongst South African students. *Physics Education*, 15(2):92-97&105.
- Matz, M. (1982).
Towards a process model for high school algebra errors. In Sleeman, D.H. and Brown, J.S., (eds.), *Intelligent Tutoring Systems*, pages 25-50. Academic Press, London.
- McClelland, G. (1975).
Earthly mechanics: Two misapprehensions and a heresy. *Physics Education*, 10:128-129.
- McCloskey, M. (1983).
Naive theories of motion. In Gentner, D. and Stevens, A., (eds.), *Mental Models*, pages 299-324. Lawrence Erlbaum Press.
- McCloskey, M., Caramazza, A. and Green, B. (1980).
Curvilinear motion in the absence of external forces: Naive beliefs about the motion of objects. *Science*, 5:1139-1141.
- McCoy, K. (1984).
Correcting object-related misconceptions: How should the system respond. COLING.

- McCoy, K.F. (1986).
The ROMPER system: Responding to object-related misconceptions using perspective. In Proceedings of the 24th Annual Meeting of the Association for Computational Linguistics, pages 97-105. Association for Computational Linguistics.
- McCoy, K.F. (1988a).
Highlighting a user model to respond to misconceptions. In A., Kobsa. and Wahlster, W., (eds.), User Models in Dialog Systems, Symbolic Computation, chapter 9, pages 233-254. Springer-Verlag, Berlin.
- McCoy, K.F. (1988b).
Reasoning on a highlighted user model to respond to misconceptions. Computational Linguistics, 14(3):52-63.
- Osborne, R.J. and Freyberg, P. (1985).
Learning in Science: The Implications of Children's Science. Heinemann.
- Osborne, R.J. and Gilbert, J.K. (1979).
An approach to student understanding of basic concepts in science. Technical report, Institute of Educational Technology, University of Surrey.
- Osborne, R.J. and Gilbert, J.K. (1980a).
A method for investigating concept understanding in science. European Journal of Science Education, 2(3):311-321.
- Osborne, R.J. and Gilbert, J.K. (1980b).
A technique for exploring students' views of the world. Physics Education, 15(6):376-379.
- Osborne, R.J. (1981).
Children's ideas about electric current. New Zealand Science Teacher, 29:12-19.
- Osborne, R.J., Bell, B.F. and Gilbert, J.K. (1983).
Science teaching and children's views of the world. European Journal of Science Education, 5(1):1-14.
- Peters, P.C. (1982).
Even honors students have conceptual difficulties with physics. American Journal of Physics, 50(6):501-508.
- Quilici, A. (1988).
Detecting and responding to plan-oriented misconceptions. In Kobsa, A. and Wahlster, W, (eds.), User Models in Dialog Systems, Symbolic Computation, chapter 5, pages 108-132. Springer-Verlag, Berlin.
- Quilici, A. (1989).
The correction machine: Formulating explanations for user misconceptions. In Sridharan, N.S., (ed.), Proceedings of the Eleventh International Joint Conference on Artificial Intelligence, pages 550-555, San Mateo, California. International Joint Conference on Artificial Intelligence, Morgan Kaufmann.
- Quilici, A., Dyer, M. and Flowers, M. (1988).
Recognizing and responding to plan-oriented misconceptions. Computational Linguistics, 14(3):38-51.
- Shannon, B. (1976).
Aristotelianism, Newtonianism and the physics of the layman. Perception, 5.
- Shipstone, D.M. (1984).

- A study of children's understanding of electricity in simple DC circuits. *European Journal of Science Education*, 6(2):185-198.
- Shipstone, D. (1988).
Pupils' understanding of simple electrical circuits: Some implications for instruction. *Physics Education*, 23(2):92-96.
- Shipstone, D.M., Rhoneck, C., Jung, W., Karrqvist, C., Dupin, J.J., Johsua, S. Licht, P. (1988). A study of student understanding of electricity in five european countries. *International Journal of Science Education*, 10(3):303-316.
- Sleeman, D. (1984a).
An attempt to understand student's understanding of basic algebra. *Cognitive Science*, 8(4):387-412.
- Sleeman, D. (1984b).
Mis-generalization: An explanation of observed mal-rules. In *Proceedings of the Sixth Annual Conference*, pages 51-56. Cognitive Science Society.
- Soloman, J. (1983).
Learning about energy: How pupils think in two domains. *European Journal of Science Education*, 5(1):49-59.
- Stevens, A., Collins, A. and Goldin, S.E. (1982).
Misconceptions in students' understanding. In Sleeman, D.H. and Brown, J.S., (eds.), *Intelligent Tutoring Systems*, pages 13-49. Academic Press, London.
- Treagust, D.F. (1988).
Development and use of diagnostic tests to evaluate students' misconceptions in science. 10(2).
- Viennot, L. (March 1974).
Sens physique et raisonnement formel en dynamique elementaire. *Bull. Soc. Fr. Phys.*, pages 35-46.
- Viennot, L. (July 1975).
Sens physique et raisonnement en dynamique elementaire ii force d'inertie. *Bull. Soc. Fr. Phys.*, pages 59-70.
- Viennot, L. (1979).
Spontaneous reasoning in elementary dynamics. *European Journal of Science Education*, 1(2):205-221.
- Viennot, L. (1985).
Analysing students' reasoning in science: A pragmatic view of theoretical problems. *European Journal of Science Education*, 7(2):151-162.
- Warren, J.W. (1979).
Understanding Force. John Murray.
- Watts, D.M. (1983).
A study of schoolchildren's alternative frameworks of the concept of force. *European Journal of Science Education*, 5(2):217-230.
- Watts, D.M. (1985).
Student conceptions of light: A case study. *Physics Education*, 20(4):183-187.
- White, B.Y. (1983).
Sources of difficulty in understanding newtonian dynamics. *Cognitive Science*, 7:41-65.
- Wicklund, R.A. and Brehm, J. (1976).

Perspectives on Cognitive Dissonance. Lawrence Erlbaum Associates, Hillsdale,
New Jersey.
Za'Rour, G.I. (1975).
Science misconceptions among certain groups of students in Lebanon. Journal of
Research in Science Teaching, 12:385-391.