
REFERENCES

- Allen, J. (1989). Natural language understanding. In Barr, A., Cohen, P. R., & Feigenbaum, E. A. (Eds.), *The Handbook of Artificial Intelligence*, Vol. IV, chap. XIX, pp. 195–239. Addison–Wesley, Reading, MA.
- Anderson, T. H. & Armbruster, B. B. (1982). Reader and text — studying strategies. In Otto, W. & White, S. (Eds.), *Reading Expository Material*, Educational Psychology Series, chap. 13, pp. 219–242. Academic Press, New York.
- Anderson, J. R. & Reder, L. M. (1979). An elaborative processing explanation of levels of processing. In Cermak, L. S. & Craik, F. I. M. (Eds.), *Levels of Processing in Human Memory*, chap. 18, pp. 382–403. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Anderson, J. R., Corbett, A. T., Fincham, J. M., Hoffman, D., & Pelletier, R. (1992). General principles for an intelligent tutoring architecture. In Regian, J. W. & Shute, V. J. (Eds.), *Cognitive Approaches to Automated Instruction*, chap. 4, pp. 81–103. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Anderson, J. R. (Ed.). (1993). *Rules of the Mind*. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Apple Computer (1994). *Inside Macintosh: Interapplication Communication*. Addison–Wesley Publishing, Reading, Massachusetts.
- Apple Computer (1995). *Apple Guide Complete: Designing and Developing Onscreen Assistance*. Addison–Wesley Publishing, Reading, Massachusetts.
- Armbruster, B. B. & Anderson, T. H. (1984). Mapping: representing informative text diagrammatically. In Holley, C. & Dansereau, D. F. (Eds.), *Spatial Learning Strategies: Techniques, Applications and Related Issues*, chap. 9, pp. 189–209. Academic Press, London.
- Ausubel, D. P., Novak, J. D., & Hanesian, H. (1978). *Educational Psychology: A Cognitive View* (Third edition). Holt, Rinehart and Winston, New York.
- Ausubel, D. P. (1963). *The Psychology of Meaningful Verbal Learning: An Introduction to School Learning*. Grune, New York.
- Bangert–Drowns, R. L., Kulik, C. L. C., Kulik, J. A., & Morgan, M. (1991). The instructional effect of feedback in test–like events. *Review of Educational Research*, 61(2), 213–238.

References

- Bartlett, F. C. (1932). *Remembering: A Study in Experimental and Social Psychology*. Cambridge University Press, Cambridge.
- Birkhoff, G. & Mac Lane, S. (Eds.) (1965). *A Survey of Modern Algebra* (Third edition). The Macmillan Company, New York.
- Bolter, D. J., Joyce, M., & Smith, J. B. (1990). *Storyspace: Hypertext Writing Environment (Manual)*. Eastergate Systems, Inc., Cambridge, MA.
- Bransford, J. D. & Johnson, M. K. (1972). Contextual prerequisites for understanding: some investigations of comprehension and recall. *Journal of Verbal Learning and Verbal Behavior*, 11, 717–726.
- Breuker, J. A. (1984). A theoretical framework for spatial learning strategies. In Holley, C. D. & Dansereau, D. F. (Eds.), *Spatial Learning Strategies: Techniques, Applications and Related Issues*, chap. 2, pp. 21–46. Academic Press, London.
- Brown, J. S. & Burton, R. R. (1978). Diagnostic models for procedural bugs in basic mathematical skills. *Cognitive Science*, 4, 379–427.
- Brown, A. L., Armbruster, B. B., & Baker, L. (1986). The role of metacognition in reading and studying. In Orasanu, J. (Ed.), *Reading Comprehension: From Research to Practice*, chap. 4, pp. 49–72. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Buzan, T. (1989). *Use Your Head*. BBC Books, London.
- Cermak, L. S. & Craik, F. I. M. (Eds.) (1979). *Levels of Processing in Human Memory*. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Collins, A. & Brown, J. S. (1988). The computer as a tool for learning through reflection. In Mandi, H. & Lesgold, A. (Eds.), *Learning Issues for Intelligent Tutoring Systems*, chap. 1, pp. 1–18. Springer-Verlag, New York.
- Collins, A. & Loftus, E. F. (1975). A spreading-activation theory of semantic processing. *Psychological Review*, 82, 407–428. Reprinted in A. Collins & E. E. Smith (Eds.), *Readings in Cognitive Science*, 126–136, San Mateo, CA: Morgan Kaufmann Publishers, 1988.
- Dansereau, D. F., Collins, K. W., McDonald, B. A., Holley, C. D., Garland, J., Diekhoff, & Evans, S. H. (1979). Development and evaluation of a learning strategy training program. *Journal of Educational Psychology*, 71(1), 64–73.
- Dansereau, D. F., Dees, S. M., Chatham, L. R., Boatler, J. F., & Sympton, D. D. (1993). *Mapping new roads to recovery: cognitive enhancements to counseling*. Training manual, Institute of Behavioral Research, Texas Christian University, Fort Worth, TX.

References

- Dansereau, D. F., Dees, S. M., & Simpson, D. D. (in press). Cognitive modularity: implication for counseling and the representation of personal issues. *Journal of Counselling Psychology*.
- Dansereau, D. F. (1985). Learning strategies research. In Segal, J. W., Chipman, S. F., & Glaser, R. (Eds.), *Thinking and Learning Skills*, Vol. 1: Relating Instruction to Research, chap. 5, pp. 209–239. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Dansereau, D. F. (1994). Learning from spatial–verbal displays: a preliminary model. Paper presented at the annual meeting of the American educational research association, New Orleans; LA.
- de Bono, E. (1985). The CoRT thinking program. In Segal, J. W., Chipman, S. F., & Glaser, R. (Eds.), *Thinking and Learning Skills*, Vol. 1: Relating Instruction to Research, chap. 10, pp. 363–388. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Derry, S. J. & Murphy, D. A. (1986). Designing systems that train learning ability: from theory to practice. *Review of Educational Research*, 26(1), 1–39.
- Dole, J. A., Duffy, G. G., Roehler, L. R., & Pearson, P. D. (1991). Moving from the old to the new: research on reading comprehension instruction. *Review of Educational Research*, 61(2), 239–264.
- Dominguez, J. (1985). The development of human intelligence: the Venezuelan case. In Segal, J. W., Chipman, S. F., & Glaser, R. (Eds.), *Thinking and Learning Skills*, Vol. 1: Relating Instruction to Research, chap. 17, pp. 529–536. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Ebel, R. L. (Ed.). (1972). *Essentials of Educational Measurement*. Prentice–Hall, Englewood Cliffs, New Jersey.
- Elsom–Cook, M. (1993). Student modelling in intelligent tutoring systems. *Artificial Intelligence Review*, 7, 227–140.
- Entwistle, N. J. (Ed.). (1981). *Style of Learning and Teaching: An Integrated Outline of Educational Psychology for Students, Teachers, and Lecturers*. John Wiley & Sons, Chichester.
- Ericsson, K. A. & Simon, H. A. (1984). *Protocol Analysis: Verbal Reports as Data*. MIT Press, Cambridge, Massachusetts.
- Fahlman, S. E. (1979). *NETL: A System for Representing and Using Real–World Knowledge*. MIT Press, Cambridge, Massachusetts.
- Feifer, R. C., Dyer, M. G., Baker, E. L., Flowers, M., & Read, W. (1986). SHERLOCK: a tutoring system for graphic learning strategies. Technical

References

- Report UCLA-AI-86-5, Artificial Intelligence Laboratory, Computer Science Department, University of California, Los Angeles, Los Angeles.
- Feifer, R. C., Dyer, M. G., Baker, E. L., & Flowers, M. (1987). SHERLOCK: identifying tasks in graphic mapping. Paper presented in the third world conference on artificial intelligence in education, Learning Research and Development Center, University of Pittsburgh, Pittsburgh.
- Feifer, R. C., Dyer, M. G., & Baker, E. L. (1988). Learning procedural and declarative knowledge. In *ITS-88 Conference Proceedings*, pp. 499-505 Montreal. Universite de Montreal.
- Feifer, R. C. (1989). An intelligent tutoring system for graphic mapping strategies. (Doctoral Dissertation.) Technical Report UCLA-AI-89-04, Artificial Intelligence Laboratory, Computer Science Department, University of California, Los Angeles, CA 90024, Los Angeles.
- Fisher, K. M. & Faletti, J. (1993). Promoting metacognition about knowledge organization skills in biology. Paper presented in the symposium on metacognition and conceptual change at the annual meeting of the American educational research association, Atlanta.
- Fisher, K. M., Faletti, J., Patterson, H., Thornton, R., Lipson, J., & Spring, C. (1990). Computer-based concept mapping: SemNet: a tool for describing knowledge net works. *Journal of College Science Teaching*, 347-352.
- Fisher, K. M. (1990). Semantic networking: the new kid on the block. *Journal of Research in Science Teaching*, 27(10), 1001-1018.
- Fisher, K. M. (1992). SemNet: a tool for personal knowledge construction. In Kommers, P. A. M., Jonassen, D. H., & Mayes, J. T. (Eds.), *Cognitive Tools for Learning*, NATO ASI Series, Vol. F81, chap. 2, pp. 63-72. Springer-Verlag, Berlin.
- Flagg, B. N. (Ed.) (1990). *Formative Evaluation for Educational Technologies*. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Fraenkel, J. R. & Wallen, N. E. (Eds.) (1993). *How to Design and Evaluate Research in Education* (Second edition). McGraw-Hill, New York.
- Goetz, E. T. (1984). The role of spatial learning strategies in processing and remembering text: a cognitive-information-processing analysis. In Holley, C. D. & Dansereau, D. F. (Eds.), *Spatial Learning Strategies: Techniques, Applications and Related Issues*, chap. 3, pp. 47-77. Academic Press, London.
- Good, T. L. & Brophy, J. E. (1990). *Educational Psychology: A Realistic Approach* (Fourth edition). Longman, New York.

References

- Halasz, F. G. (1988). Reflections on NoteCards: seven issues for the next generation of hypermedia systems. *Communications of the ACM*, 31(7), 836–852.
- Heeren, E. & Kommers, P. A. M. (1992). Flexibility of expressiveness: a critical factor in the design of concept mapping tools for learning. In Kommers, P. A. M., Jonassen, D. H., & Mayes, J. T. (Eds.), *Cognitive Tools for Learning*, NATO ASI Series, Vol. F81, chap. 7, pp. 82–101. Springer–Verlag, Berlin.
- Holley, C. D. & Dansereau, D. F. (1984a). The development of spatial learning strategies. In Holley, C. D. & Dansereau, D. F. (Eds.), *Spatial Learning Strategies: Techniques, Applications and Related Issues*, chap. 1, pp. 3–19. Academic Press, London.
- Holley, C. D. & Dansereau, D. F. (1984b). Networking: the technique and the empirical evidence. In Holley, C. D. & Dansereau, D. F. (Eds.), *Spatial Learning Strategies: Techniques, Applications and Related Issues*, chap. 4, pp. 81–108. Academic Press, London.
- Holley, C. D. & Dansereau, D. F. (Eds.). (1984c). *Spatial Learning Strategies: Techniques, Applications and Related Issues*. Academic Press, London.
- Howard, R. W. (1987). *Concepts and Schemata*. Cassel Education, London.
- Jonassen, D. H. (1984). Developing a learning strategy using pattern notes: a new technology. *Programmed Learning and Educational Technology*, 21(3), 163–175.
- Jonassen, D. H. (1985). Learning strategies: a new educational technology. *Programmed Learning and Educational Technology*, 22(1), 26–34.
- Jonassen, D. H. (1987). Assessing cognitive structure: verifying a method using pattern notes. *Journal of Research and Development in Education*, 20(3), 1–14.
- Jonassen, D. H. (1990). Semantic network elicitation: tools for structuring hypertext. In McAleese, R. & Green, C. (Eds.), *Hypertext: State of the Art*, pp. 142–152. Intellect, Oxford, England.
- Jonassen, D. H. (1992a). Semantic networking as cognitive tools. In Kommers, P. A. M., Jonassen, D. H., & Mayes, J. T. (Eds.), *Cognitive Tools for Learning*, NATO ASI Series, Vol. F81, pp. 19–21. Springer–Verlag, Berlin.
- Jonassen, D. H. (1992b). What are cognitive tools? In Kommers, P. A. M., Jonassen, D. H., & Mayes, J. T. (Eds.), *Cognitive Tools for Learning*, NATO ASI Series, Vol. F81, chap. 1, pp. 1–6. Springer–Verlag, Berlin.
- Jonassen, D. H. (1993). Effects of semantically structured hypertext knowledge bases on users' knowledge structures. In McKnight, C., Dillon, A., &

References

- Richardson, J. (Eds.), *Hypertext: A Psychological Perspective*, pp. 153–168. Ellis Horwood, Chichester.
- Just, M. A. & Carpenter, P. A. (1987). *The Psychology of Reading and Language Comprehension*. Allyn and Bacon, Boston.
- Kay, J. (1991). An explicit approach to acquiring models of student knowledge. In Lewis, R. & Otsuki, S. (Eds.), *Advanced Research on Computers in Education*, pp. 263–268. Elsevier Science Publisher B. V., North-Holland.
- Kintsch, W. (1974). *The Representation of Meaning in Memory*. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Knaster, S. & Rollin, K. (1992). *Macintosh Programming Secrets* (Second edition). Addison-Wesley Publishing, Reading, Massachusetts.
- Kommers, P. A. M., Jonassen, D. H., & Mayes, J. T. (Eds.) (1992). *Cognitive Tools for Learning*. NATO ASI Series, Vol. F81. Springer-Verlag, Berlin.
- Kopec, D., Wood, C., & Brody, M. (1990). Using cognitive mapping techniques for educating about sexually transmitted diseases with an intelligent tutoring system. *Journal of Artificial Intelligence and Education*, 2(2).
- Kozma, R. B. (1992). Constructing knowledge with learning tool. In Kommers, P. A. M., Jonassen, D. H., & Mayes, J. T. (Eds.), *Cognitive Tools for Learning*, NATO ASI Series, Vol. F81, chap. 3, pp. 23–32. Springer-Verlag, Berlin.
- Lambiotte, J. G., Dansereau, D. F., Cross, D. R., & Reynolds, B. (1989). Multirelational semantic maps. *Educational Psychology Review*, 1(4), 331–367.
- Larkin, J. H. & Simon, H. A. (1987). Why a diagram is (sometimes) worth ten thousand words. *Cognitive Science*, 11, 62–99.
- Lenat, D. B. & Guha, R. V. (Eds.) (1990). *Building Large Knowledge-Based Systems: Representation and Inference in the Cyc Project*. Addison-Wesley, Reading, Massachusetts.
- Lesgold, A. M., Lajoie, S., Bunzo, M., & Eggan, G. (1992). SHERLOCK: a coached practice environment for an electronics troubleshooting job. In Larkin, J. & Chabay, R. R. (Eds.), *Computer Assisted Instruction and Intelligent Tutoring: Shared Issues and Complementary Approaches*, chap. 7, pp. 201–238. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Mayes, J. T. (1992). Cognitive tools: a suitable case for learning. In Kommers, P. A. M., Jonassen, D. H., & Mayes, J. T. (Eds.), *Cognitive Tools for Learning*, NATO ASI Series, Vol. F81, chap. 2, pp. 7–18. Springer-Verlag, Berlin.

References

- McCagg, E. C. & Dansereau, D. F. (1991). A convergent paradigm for examining knowledge mapping as a learning strategy. *Journal of Educational Research*, 84(6), 317–324.
- McKeachie, W. J. (1984). Spatial strategies: critique and educational implications. In Holley, C. D. & Dansereau, D. F. (Eds.), *Spatial Learning Strategies: Techniques, Applications and Related Issues*, chap. 15, pp. 301–312. Academic Press, London.
- McKoon, G. & Ratcliff, R. (1992). *Inference during reading*. *Psychological Review*, 99(3), 440–466.
- Messick, S. (1987). Structural relationships across cognition, personality, and style. In Snow, R. E. & Farr, M. J. (Eds.), *Aptitude, Learning and Instruction*, Vol. 3: Conative and Affective Process Analyses, chap. 3, pp. 35–75. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Mirande, M. J. A. (1984). Schematizing: technique and applications. In Holley, C. D. & Dansereau, D. F. (Eds.), *Spatial Learning Strategies: Techniques, Applications and Related Issues*, chap. 7, pp. 149–161. Academic Press, London.
- Nickerson, R., Perkins, D., & Smith, E. (1985). *The Teaching of Thinking*. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Nielsen, J. (1990). Through hypertext. *Communications of the ACM*, 33(3), 298–310.
- Norman, D. A. & Bobrow, D. G. (1975). On data-limited and resource-limited processes. *Cognitive Psychology*, 7, 44–64.
- Novak, J. D. & Gowin, D. B. (1984). *Learning How to Learn*. Cambridge University Press, New York.
- Novak, J. D. (1990a). Concept mapping: a useful tool for science education. *Journal of Research in Science Teaching*, 27(10), 937–947.
- Novak, J. D. (1990b). Concept maps and vee diagrams: two metacognitive tools to facilitate meaningful. *Instructional Science*, 19(1), 29–52.
- Paivio, A. (Ed.) (1971). *Imagery and Verbal Processes*. Holt, Rinehart & Winston, New York.
- Patterson, M. E., Dansereau, D. F., & Newbern, D. (1992). The effects of communication aids and strategies on cooperative teaching. *Journal of Educational Psychology*, 84(4), 453–561.

References

- Preece, J., Rogers, Y., Sharp, H., Benyon, D., Holland, S., & Carey, T. (1994). *Human Computer Interaction*. Addison–Wesley Publishing, Reading, Massachusetts.
- Quillian, M. R. (1968). Semantic memory. In Minsky, M. (Ed.), *Semantic Information Processing*, pp. 216–260. MIT Press, Cambridge, MA. Reprinted in A. Collins & E. Smith (Eds.), *Readings in Cognitive Science*, 80–101, San Mateo, CA: Morgan Kaufmann Publishers, 1988.
- Reder, L. M. (1980). The role of elaboration in the comprehension and retention of prose. *Review of Educational Research*, 50(1), 5–53.
- Reiter, R. (1978). On closed world data bases. In Gallaire, H. & Minker, J. (Eds.), *Logic and Data Bases*, pp. 55–76. Plenum Press, New York. Reprinted in M. L. Ginsberg (Ed.), *Readings in Nonmonotonic Reasoning*, 300–310, San Mateo, CA: Morgan Kaufmann Publishers, 1987.
- Rewey, K. L., Dansereau, D. F., Skaggs, L. P., Hall, R. L., & Pitre, U. (1989). Effects of scripted cooperation and knowledge maps on the processing of technical material. *Journal of Educational Psychology*, 81(4), 604–609.
- Rothkopf, E. Z. (1982). Adjunct aids and the control of mathemagenic activities during purposeful reading. In Otto, W. & White, S. (Eds.), *Reading Expository Material*, Educational Psychology Series, chap. 7, pp. 109–138. Academic Press, New York.
- Rowland, M. (1992). *Biology*. University of Bath Science. Nelson, Walton–on–Thames.
- Royer, J. M., Cisero, C. A., & Carlo, M. S. (1993). Techniques and procedures for assessing cognitive skills. *Review of Educational Research*, 63(2), 201–243.
- Rumelhart, D. E. & Norman, D. A. (1978). Accretion, tuning, and restructuring: three modes of learning. In Cotton, J. W. & Klatzky, R. L. (Eds.), *Semantic Factors in Cognition*, chap. 2, pp. 37–53. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Rumelhart, D. E. & Ortony, A. (1977). The representation of knowledge in memory. In Anderson, R. C., Spiro, R. J., & Montague, W. E. (Eds.), *Schooling and the Acquisition of Knowledge*, chap. 4, pp. 99–135. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Rumelhart, D. E., Lindsay, P. H., & Norman, D. A. (1972). A process model for long term memory. In Tulving, E. & Donaldson, W. (Eds.), *Organization of Memory*, pp. 197–246. Academic Press, New York.

References

- Sharples, M. & O'Malley, C. (1988). A framework for the design of a writer's assistant. In Self, J. (Ed.), *Artificial Intelligence and Human Learning: Intelligent Computer Aided Instruction*, chap. 17, pp. 276–290. Chapman and Hall, London.
- Sharples, M., Goodlet, J., & Clutterbuck, A. (1994). A comparison of algorithms for hypertext notes network linearization. *International Journal of Human–Computer Studies*, 40, 727–752.
- Shneiderman, B. (1987). *Designing the User Interface: Strategies for Effective Human Computer Interaction*. Addison–Wesley Publishing, Reading, Massachusetts.
- Shute, V. J. & Regian, J. W. (1993). Principles for evaluating intelligent tutoring systems. *Journal of Artificial Intelligence and Education*, 4(2/3), 245–271.
- Sleeman, D. (1982). Assessing aspects of competence in basic algebra. In Sleeman, D. & Brown, J. S. (Eds.), *Intelligent Tutoring Systems*, chap. 9, pp. 185–199. Academic Press, London.
- Snow, R. E. & Farr, M. J. (Eds.). (1987). *Aptitude, Learning and Instruction*, Vol. 3: Conative and Affective Process Analyses. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Snow, R. E. (1989). Aptitude–treatment interaction as a framework for research on individual differences in learning. In Ackerman, P. L., Sternberg, R. J., & Glaser, R. (Eds.), *Learning and Individual Differences: Advances in Theory and Research*, Chap. 2, pp. 13–59. W. H. Freeman, New York.
- Sternberg, R. J. (1988). Intelligence. In Sternberg, R. J. & Smith, E. E. (Eds.), *The Psychology of Human Thought*, pp. 267–308. Cambridge University Press, Cambridge.
- Stevens, A., Collins, A., & Goldin, S. E. (1982). Misconceptions in student's understanding. In Sleeman, D. & Brown, J. S. (Eds.), *Intelligent Tutoring Systems*, chap. 1, pp. 13–24. Academic Press, London.
- Suen, H. K. (1990). *Principles of Test Theories*. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- Surber, J. (1984). Mapping as a testing and diagnostic device. In Holley, C. D. & Dansereau, D. F. (Eds.), *Spatial Learning Strategies: Techniques, Applications and Related Issues*, chap. 10, pp. 213–233. Academic Press, London.
- Twidale, M. (1993). Redressing the balance: the advantages of informal evaluation techniques for intelligent learning environments. *Journal of Artificial Intelligence and Education*, 4(2/3), 155–178.

References

- van Dijk, T. A. & Kintsch, W. (1983). *Strategies of Discourse Comprehension*. Academic Press, New York.
- Wallace, J. D. & Mintzes, J. J. (1990). The concept map as a research tool: exploring conceptual changes in biology. *Journal of Research in Science Teaching*, 27(10), 1033–1052.
- Weinstein, C. E. & Mayer, R. E. (1986). The teaching of learning strategies. In Wittrock, C. (Ed.), *Handbook of Research on Teaching* (Third edition), chap. 11, pp. 315–327. Macmillan Publishing Company, New York.
- Weinstein, C. E. & Underwood, V. L. (1985). Learning strategies: the how of learning. In Segal, J. W., Chipman, S. F., & Glaser, R. (Eds.), *Thinking and Learning Skills*, Vol. 1: Relating Instruction to Research, chap. 6, pp. 241–258. Lawrence Erlbaum Associates, Hillsdale, New Jersey.
- White, A. & Easterbrook, S. (1993). DICTOFUN: a concept dictionary for children. *Journal of Computer Assisted Learning*, 9, 161–170.
- Winn, W. D. & Sutherland, S. W. (1989). Factors influencing the recall of elements in maps and diagrams and the strategies used to encode them. *Journal of Educational Psychology*, 81(1), 33–39.
- Winn, W., Li, T. Z., & Schill, D. (1991). Diagrams as aids to problem solving: their role in facilitating search and computation. *Educational Technology Research and Development*, 39(1), 17–29.
- Winn, W. (1991). Learning from maps and diagrams. *Educational Psychology Review*, 3(3), 211–247.
- Wittgenstein, L. (1963). *Philosophical Investigations* (Second edition). Basil Blackwell Ltd, Oxford.