

REFERENCES

- Allen, M.S., Guilford, J.S., & Merrifield, P.R. (1960). *The evaluation of selected intellectual factors by creative research scientists* [Report]. Los Angeles: University of Southern California.
- American Academy for the Advancement of Science. (1993). *Benchmarks for science literacy*. New York: Oxford University Press.
- Atkin, J.M. & Atkin, A. (1989). *Improving science education through local alliances: a report to the Carnegie Corporation of New York*. Santa Cruz, CA: Network Publications.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman.
- Baxter, S.D., Thompson, W.O, Litaker, M.S., Guinn, C.H., Frye, F.H.A., Baglio, M.L., & Shaffer, N.M. (2003). Accuracy of fourth-graders' dietary recalls of school breakfast and school lunch validated with observations: In-person versus telephone interviews. *Journal of Nutritional Education and Behavior*, 35, 124-134.
- Bellipanni, L. (1994). *The science fair experience: Profile of science fair winners*. Unpublished doctoral dissertation, Mississippi State University, Mississippi State, MS
- Biological Science Curriculum Study. (2007). *As BSCS begins its 50th anniversary celebration (1958-2008)*. Retrieved November 23, 2007 from <http://www.bsos.org/50th>
- Bleicher, R.E. (1995). *Conceptual change based on laboratory experience*. (ERIC Document Reproduction Service No. ED391672).
- Bransford, J, & Stein, B.S. (1984). *The IDEAL problem solver: A guide for improving thinking, learning, and creativity*. New York: W.H. Freeman.
- Bredderman, T. (1981). *Elementary school process curricula: A meta-analysis*. (ERIC Document Reproduction Service No. ED170-333).

- Brown, A.L., & Campione, J.C. (1994). Guided discovery in a community of learners. In K. McGilly (Ed.), *Classroom lessons: Integrating cognitive theory and classroom practice*. Cambridge, MA: MIT Press/Bradford.
- Brown, J.S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18, 32-42.
- Buldyrev, D.V. (1994). Science research in the classroom. *The physics teacher* 32, 411-415.
- Cattell, R.B. (1943). The description of personality: basic traits resolved into clusters. *Journal of Abnormal and Social Psychology*, 38, 476-506.
- Charney, J., Hmelo-Silver, C.E., Sofer, W., Neigeborn, L., Coletta, S., & Nemeroff, M. (2007). Cognitive apprenticeship in science through immersion in laboratory practices. *International Journal of Science Education*, 29, 195-213.
- Chase, W. G., & Simon, H.A. (1973). Perception in chess. *Cognitive psychology*, 4, 55-81.
- Chedd, G (Writer & Director) (2004). Don't forget. [Television series episode]. In G. Chedd (Producer) *Scientific American Frontiers*. Watertown, MA: Chedd-Angier Production Company .
- Chi, M.T.H., Glaser, R. & Rees, E. (1982). Expertise in problem solving. In R. J. Sternberg (Ed.), *Advances in the psychology of human intelligence*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Collins, A. (1988). Cognitive apprenticeship and instructional technology. Technical Report #6899.
- Colman, A.M. (2001). *Dictionary of Psychology*. New York: Oxford University Press.
- Colwell, B. (2003). Science fairs. *Computer*, 36, 4, 13-16.

- Connecticut Science Fair. (2006). Judging at the CSF. Retrieved December 26, 2007 from http://www.ctsciencefair.org/student_guide/judging_process.html
- Costenson, K & Lawson A.E. (1986). Why isn't inquiry used in more classrooms? *The American Biology Teacher*, 48, 150-158.
- Csikszentmihalyi, M. (1990). The domain of creativity. In M.A. Runco & R.S. Albert (Eds.), *Theories of creativity*. Newbury Park, CA: Sage.
- Czarnik, J.C. & Hickey, D.T. (1997). Problem generation in the Mission to Mars curriculum. [Paper] American Educational Research Association Annual Meeting, Symposium session, 16.41. Cambridge: BBN Labs, Inc.
- Daupert, D. (2002). The Osborne-Parnes creative problem solving process manual. Retrieved July 20, 2005 from <http://www.ideastream.com/create/>
- DeBruin, J.E. & Schaff, J.F. (1982). Community-based science research program for gifted and talented high school students. *Roeper Review*, 5, 2, 12-14.
- Delcourt, M.A.B. (1993). Creative productivity among secondary students: combining energy, interest, and imagination. *Gifted Child Quarterly*, 37, 23-31.
- Delcourt, M. A. B. (2007). Creative productive behavior and self-regulation: Keys to developing projects in the natural and social sciences In B. M. Shore, M. W. Aulls, & M. A. B. Delcourt (Eds.), *Inquiry in education volume II: Overcoming barriers to successful implementation*. Mahwah, NJ: Erlbaum.
- Dillon, J.T. (1982). Problem finding and solving. *The journal of creative behavior*, 16, 97-111.
- Driscoll, M.P. (2005). *Psychology of learning for instruction*. Boston: Allyn and Bacon.
- Dweck, C.S. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.

- Einstein, A. & Infeld, L. (1938). *The evolution of physics*. New York: Simon and Schuster, Inc.
- El-Nemr, M.A. (1979). *Meta-analysis of the outcomes of teaching biology as inquiry*. Boulder, CO: University of Colorado
- Ericsson, K. A., & Lehmann, A.C. (1996). Expert and exceptional performance: Evidence on maximal adaptations on task constraints. *Annual Review of Psychology*, *47*, 273-305.
- Evensen, D.H., Salisbury-Glennon, J.D., & Glenn, J. (2001). A qualitative study of six medical students in a problem-based curriculum: Toward a situated model of self-regulation. *Journal of Educational Psychology*, *93*, 659-676.
- Feldhusen, J.F. (2005). Educating gifted and talented youth for high-level expertise and creative achievement. *Educational Research Journal*, *20*, 15-25.
- Feldhusen, J.F., & Kennedy, D.M. (1988). Preparing gifted youth for leadership roles in a rapidly changing society. *Roeper Review*, *10*, 226-230.
- Firestien, R.L., & Treffinger, D.J. (1989). Update: Guidelines for effective facilitation of creative problem solving. *The Gifted Child Today*, *12*, 44-47.
- Fontenot, N.A. (1993). Effects of training in creativity and creative problem finding upon business people. *The Journal of Social Psychology*, *133*, 1, 11-22.
- Fraenkel, J.R., & Wallen, N.E. (2002). *How to design and evaluate research in education*, 5th edition. New York: McGraw-Hill Higher Education.
- Gable, R.K. (1986). *Instrument development in the affective domain*. Boston: Kluwer-Nijhoff.
- Gersten, R., & Baker, S. (1998). Real world use of scientific concepts: Integrating situated cognition with explicit instruction. *Exceptional Children*, *65*, 23-35.
- Getzels, J. (1976). Problem finding and the inventiveness of solutions. *Journal of Creative Behavior*, *16*, 97-111.

- Getzels, J. (1979). Problem finding: a theoretical note. *Cognitive Science*, 3, 167-172.
- Getzels, J., & Csikszentmihalyi, M. (1976). *The creative vision: A longitudinal study of problem finding in art*. New York: Wiley & Sons.
- Gick, M.L. (1986). Problem-solving strategies. *Educational Psychologist*, 21, 99-120.
- Gifford, V., & Wiygul, S.M. (1987). The effect of the use of outside facilities and resources on success in secondary school science fairs. (ERIC Document Reproduction Service No. ED288740).
- Girill, T.A. (2006). Building science-relevant literacy with technical writing in high school. *IEEE Transactions on Professional Communication*, 49, 346-353.
- Glaser, R. (1984). Education and thinking: The role of knowledge. *American Psychologist*, 39, 93-104.
- Greeno, J. (1978). Natures of problem-solving abilities. In W. Estes (Ed.), *Handbook of learning and cognitive processes* (pp. 239-270). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Grobman, A. (1993). A fair proposition? *The Science Teacher*, 60, 40-41.
- Guilford, J.P. (1967). *The nature of human intelligence*. New York: McGraw Hill.
- Hammer, D., & Schifter, D. (2001). Practices of inquiry teaching and research. *Cognition and Instruction*, 19, 441-478.
- Herron, M.D. (1971). The nature of scientific enquiry. *The School Review*, 79, 171-212
- Hoover, S.M. (1994). Scientific problem finding in gifted fifth-grade students. *Roeper Review*, 16, 3, 156-159.
- Hoover, S.M., & Feldhusen, J.F. (1990). The scientific hypothesis formulation ability of gifted ninth-grade students. *Journal of Educational Psychology*, 82, 838-848.

- Hoover, S. M., & Feldhusen, J.F. (1994). Scientific problem solving and problem finding: a theoretical model. In M.A. Runco (Ed.), *Problem finding, problem solving, and creativity*. Norwood, NJ: Ablex Publishing Company.
- Huberman, A.M., & Miles, M.B. (1994). Data management and analysis methods. In N.K. Denzin & Y.S Lincoln (Eds.), *Handbook of qualitative research* (pp. 428-444). Thousand Oaks, CA: SAGE Publications.
- Innamorato, G. (1998). Creativity in the development of scientific giftedness: educational implications. *Roeper Review*, 21, 1, 54-59.
- Intel Corporation. (2007). Five decades of brilliant thinkers. Retrieved September 28, 2007 from <http://www.intel.com/pressroom/kits/education/isef.htm>
- Isaac, S., & Michael, W.B. (1997). *Handbook in research and evaluation for education and the behavioral sciences*. San Diego: Educational and Industrial Testing Services.
- Isben, C.A., & Ballweg, J.A. (1974). Telephone interviews in social research: Some methodological considerations. *Quality and Quantity*, 8, 181-192.
- Janesick, V.J. (1994). The dance of qualitative research design: Metaphor, methodology, and meaning. In N.K Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications.
- Jonassen, D.H. (1997). Instructional design models for well-structured and ill-structured problem-solving learning outcomes. *Educational Technology Research and Development*, 45, 65-94.
- Joyce, B., Weil, M., & Calhoun, E. (2004). *Models of teaching*. Boston: Allyn and Bacon.
- Junior Science and Humanities Symposium. (2007). What is JSHS? Retrieved November 23, 2007 from <http://www.jshs.org/about.html>

- Kay, S. (1994a). From theory to practice: Promoting problem-finding behavior in children. *Roeper Review*, 16, 195-197.
- Kay, S. (1994b). A method for investigating the creative thought process. In M.A. Runco (Ed.), *Problem finding, problem solving, and creativity*. Norwood, NJ: Ablex Publishing Company.
- Korner-Bitensky, N., Wood-Dauphinee, S., Shapiro, S., & Becker, R. (1993). A telephone interview compared to a face-to-face interview in determining health status of patients discharged home from a rehabilitation hospital. *Canadian Journal of Rehabilitation*, 7, 73-75.
- Kosinar W. C. (1955). *The science research temperament scale*. Chicago: Psychometric Affiliates.
- Krefting, L. (1991). Rigor in qualitative research: the assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45, 214-222.
- LaBanca, F. (2006). *Evaluation of the applied science research program at Newtown High School*. Danbury, CT: Western Connecticut State University.
- LaBanca, F. (2007). The Connecticut Science Fair: impressions of sixty years of innovation. *Connecticut Journal of Science Education*, 45, 14-18.
- LaBanca, F. (2008a). Figure 1. A case study in situated cognition. In M. Orey (Ed.) *Emerging perspectives on learning, teaching, and technology*. Retrieved January 20, 2008 from http://projects.coe.uga.edu/epltt/index.php?title=A_case_study_in_situated_cognition
- LaBanca, F. (2008b). In search of scientific creativity [Weblog]. Retrieved January 2, 2008 from <http://problemfinding.blogspot.com>

- LaBanca, F. (2008c). In search of scientific creativity [Wiki]. Retrieved January 2, 2008 from <http://problemfinding.pbwiki.com>
- LaBanca, F. (2008d). Applied science research [Weblog]. Retrieved January 2, 2008 from <http://appliedscienceresearch.blogspot.com>
- Larkin, J.H., McDermott, J., & Simon D. Models of competence in solving physics problems. *Cognitive Science*, 4, 317-345.
- Lawler, M.C. (1994). Development of a standardized telephone interview instrument. *Occupational Therapy Journal of Research*, 14, 38-52.
- Leavitt, H.J. (1976). Problem finding, problem solving, and solution implementing: creativity in the context of working problems through. *UCLA Educator*, 18, 2, 1-5.
- Lexico Publishing Group. (2008) dictionary.com. Retrieved January 2, 2008 from dictionary.reference.com
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage Publications.
- Lorentz Consulting, LLC. (2003). Level ten formmail. Retrieved August 6, 2007 from <http://www.leveltendesign.com/L10Apps/Fm/>
- Iwahedi. (2007). ISEF intro video 2007 [Flash Video]. Retrieved August 5, 2007 from www.youtube.com/franklabanca
- Macromedia, Inc. (2002). Dreamweaver MX version 6.0 [Computer software]. San Francisco: Macromedia, Inc.
- Manconi, L, Aulls, M.W., & Shore, B.M. (2007). Teachers' use and understanding of strategy in inquiry instruction. In B. M. Shore, M. W. Aulls, & M. A. B. Delcourt (Eds.), *Inquiry in*

- education volume II: Overcoming barriers to successful implementation*. Mahwah, NJ: Erlbaum.
- Mao, S., & Chang, C. (1998). Impacts of an inquiry teaching method on Earth science students' learning outcomes and attitudes at the secondary level. *Proceedings of the National Science Council ROC (D)*, 8, 93-101.
- Martin-Hansen, L. (2002). Defining inquiry. *The Science Teacher*, 69, 34-37.
- McBride, J.W., & Silverman, F. L. (1988). Judging fairs fairly. *Science and Children*, 25, 15-18.
- Meeker, M., & Meeker, R. (1986). The SOI system for gifted education. In Joseph S. Renzulli (Ed.), *Systems and models for developing programs for the gifted and talented* (pp. 194-215). Mansfield Center, CT: Creative Learning Press.
- Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass Publishers.
- Metz, K.E. (1995). Reassessment of developmental constraints on children's science instruction. *Review of Educational Research*, 65, 93-128.
- Metz, S. (2006). Problem-based learning. *The Science Teacher*, 73, 8, 8.
- Microsoft Corporation. (1999a). Microsoft® Excel 2000 [Computer software]. Redmond, WA: Microsoft Corporation.
- Microsoft Corporation. (1999b). Microsoft® Word 2000 [Computer software]. Redmond, WA: Microsoft Corporation.
- Midanik, L.T., Hines, A.M., Greenfield, T.K., & Rogers, J.D. (2000). Face-to-face versus telephone interviews: Using cognitive methods to assess alcohol survey questions. *Contemporary Drug Problems*, 26, 673-693.

- Moustakas, C. (1990). *Heuristic research: Design, methodology, and applications*. Thousand Oaks, CA: Sage Publications.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage Publications.
- Murphy A.P. & Coppola, R.K. (1997). GLOBE: A science/education partnership program. Presented at the Annual Meeting of the American Educational Research Association, Chicago March 24-28, 1997.
- Natale, M. (1978). Perceived empathy, warmth, and genuineness as affected by interviewer timing of speech in a telephone interview. *Psychotherapy: Theory, Research and Practice*, 15, 145-152.
- National Research Council. (1996). *National science education standards*. Washington, DC: National Academy Press.
- National Research Council. (2000). *Inquiry and the National Science Education Standards*. Washington, DC: National Academy Press.
- Newell, A., & Simon, H. (1972). *Human problem solving*. Engelwood Cliffs, NJ: Prentice Hall.
- Newtown High School. (2003). Graduation standards problem solving. Sandy Hook, CT: Newtown Public Schools.
- Ngoi , M. (2004). Working with gifted science students in a public high school environment: one school's approach. *Journal of Secondary Gifted Education*, 15, 141-147.
- Nuance Communications, Inc. (2007). Dragon naturally-speaking 9.0 preferred [Computer software]. Burlington, MA: Nuance Communications, Inc.
- Olsen, L.S. (1985). *The North Dakota science and engineering fair: Its history and a survey of participants*. Unpublished masters thesis, North Dakota State University, Fargo, ND.

- Oxford High School. (2007). Oxford High School academic skill expectations. Oxford, CT: Oxford Public Schools.
- Patton, M.Q. (1980). *Qualitative evaluation methods*. Thousand Oaks, CA: Sage Publications.
- Pavlica, R. (2004). *Authentic science research in the high school*. Armonk, NY: Robert Pavlica.
- Pea, R.D. (1993). Practices of distributed intelligence and designs for education. In G. Salomon (Ed.), *Distributed cognition*. New York: Cambridge University Press.
- Pintrich, P.R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P.R. Pintrich, & M. Zeidner (Eds.) *Handbook of self-regulation* New York: Academic Press.
- Pitney, W.A., & Parker, J. (2002). Qualitative research applications in athletic training. *Journal of Athletic Training*, 37, 168-173.
- Pizzini, E.L. (1985). Improving science instruction for gifted high school students. *Roeper Review*, 7, 231-234.
- Prince, M. (2004) Does active learning work? A review of the research. *Journal of Engineering Education*, 93, 223-231.
- Pyle, E. (1996). Influences on science fair participant research design selection and success. *School Science and Mathematics*, 96, 400-406.
- Qualis Research Associates. (2006). The ethnograph. [Computer software]. Colorado Springs, CO: Qualis Research Associates.
- Raven, J.C. (1958). *Progressive matrices sets A, B, C, D, and E*. London: H.K. Lewis and Company.
- Rekoff, M.G. (1985). On reverse engineering. *IEEE Transactions on Systems, Man, and Cybernetics*, Mar/Apr, 244-252.

- Renzulli, J.S. (1977). *The enrichment triad model: A guide for developing defensible programs for the gifted and talented*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J.S. (1986). The three-ring conception of giftedness: a developmental model for creative productivity. In R. J. Sternberg & J.E. Davidson (Eds.), *Conceptions of giftedness*. New York: Cambridge University Press.
- Renzulli, J.S. & Reis, S.M. (1985). *The schoolwide enrichment model: A comprehensive plan for educational excellence*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J.S. & Reis, S. M. (1986). The enrichment triad/revolving door model: A schoolwide plan for the development of creative productivity. In J.S. Renzulli (Ed.), *Systems and models for developing programs for the gifted and talented*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J.S. & Reis, S.M. (2001). The schoolwide enrichment model executive summary. Retrieved November 25, 2006 from <http://www.sp.uconn.edu/~nrcgt/sem/semexec.html>
- Richardson, A.G. (1986). Sex differences in creativity among a sample of Jamaican adolescences. *Journal of Creative Behavior*, 20, 147.
- Ritchie, S.M., & Rigano, D.L. (1996). Laboratory apprenticeship through a student research project. *Journal of Research in Science Teaching*, 33, 799-815.
- Robinson, G. (2004). Replicating a successful authentic science research program: an interview with Dr. Robert Pavlica. *Journal of Secondary Gifted Education*, 15, 148-154.
- Robinson, K. (2006). Do schools today kill creativity? [Flash Video]. Retrieved August 5, 2007 from <http://www.ted.com/index.php/talks/view/id/66>
- Roehring, G.H., & Luft, J.A. (2004) Inquiry teaching in high school chemistry classrooms: the role of knowledge and beliefs. *Journal of Chemical Education*, 81, 1510-1516.

- Rojewski, J.W., & Schell, J.W. (1994). Cognitive apprenticeship for learners with special needs. *Remedial and Special Education, 15*, 234-243.
- Romey, W.D. (1980). *Teaching the gifted and talented in the science classroom*. Washington, D.C.: National Education Association.
- Rostan, S.M. (1994). Problem finding, problem solving, and cognitive controls: An empirical investigation of critically acclaimed productivity. *Creativity Research Journal, 7*, 97-110.
- Roth, W.-M. (1993). Problem-centered learning or the integration of mathematics and science in a constructivist laboratory: A case study. *School Science and Mathematics, 93*, 113-122.
- Roth, W.-M. (1998). *Designing communities*. Dordrecht: Kluwer Academic Publishers.
- Roth, W-M & Bowen, G. M. (1993). An investigation of problem framing and solving in grade 8 open-inquiry science program. *The Journal of the Learning Sciences, 3*, 165-204.
- Roth, W.-M., & McGinn, M.K. (1997). Deinstitutionalizing school science: Implications of a strong view of situated cognition. *Research in Science Education, 27*, 497-513.
- Roth, W-M. & Roychoudhury, A. (1993). The development of science process skills in authentic contexts. *Journal of Research in Science Teaching, 30*, 127-152.
- Rosvally, H.E. (2002). *Designing and implementing an authentic science research program*. Unpublished doctoral dissertation, Columbia University, New York.
- Runco, M.A. (1994). *Problem finding, problem solving, and creativity*. Norwood, NJ: Ablex Publishing Company.
- Runco, M.A., & Chand, I. (1994) Problem finding, evaluative thinking, and creativity. In M.A. Runco (Ed.), *Problem finding, problem solving, and creativity*. Norwood, NJ: Ablex Publishing Company.

- Runco, M.A. & Nemiro, J. (1994). Problem finding, creativity, and giftedness. *Roeper Review*, 16, 235-241.
- Runco, M.A. & Okuda, S.M. (1988). Problem-discovery, divergent thinking, and creative process. *Journal of Youth and Adolescence*, 17, 211-220.
- Runco, M.A. & Okuda, S.M. (1991). The instructional enhancement of the ideational originality and flexibility scores of divergent thinking tests. *Applied Cognitive Psychology*, 5, 435-441.
- Sandelowski, M. (1995). Sample size in qualitative research. *Research in Nursing and Health*, 18, 179-183.
- Schneider, R.M., Krajcik, J, Marx, R.W., & Soloway, E. (2002). Performance of students in project-based science classrooms on a national measure of science achievement. *Journal of Research in Science Teaching*, 39, 410-422.
- Science Service. (1941). Science Service backs science clubs movement. *Science News Letter*, 40, 204.
- Science Service. (2006a). *International rules for precollege science research: Guidelines for science and engineering fairs 2006-2007*. Washington, DC: Science Service.
- Science Service. (2006b). History of Science Service. Retrieved September 28, 2007 from <http://www.sciserv.org/history.html>
- Science Service. (2007). *Intel International Science and Engineering Fair 2007 finalist directory*. Retrieved November 20, 2007 from <http://www.sciserv.org/isef/document/finaldir.pdf>
- Shepardson, D.P. (1997). The nature of student thinking in life science laboratories. *School Science and Mathematics*, 97, 37-44.

- Shin, P.H.B. (2006, July 31). Docs let leeches suck your blood: He's sinking his little choppers in and then he'll start undulating. *Daily News*, p.25.
- Shore, B. M., Aulls, M. W., & Delcourt, M. A. B. (2007). *Inquiry in education volume II: Overcoming barriers to successful implementation*. Mahwah, NJ: Erlbaum.
- Shore, B. M., Delcourt, M. A. B., Syre, C. A., & Shapiro, M. (2007). The phantom of the science fair. In B. M. Shore, M. W. Aulls, & M. A. B. Delcourt (Eds.), *Inquiry in education volume II: Overcoming barriers to successful implementation*. Mahwah, NJ: Erlbaum.
- Shymansky, J.A., Hedges, L.V., & Woodworth, G. (1990). A reassessment of effects of inquiry-based science curriculum of the '60s on student performance. *Journal of Research in Science Teaching*, 27, 127-144.
- Shymansky, J.A., Kyle, W.C., & Alport, J.M. (1993). The effects of new science curricula on student performance. *Journal of Research in Science Teaching*, 20, 387-404.
- Simpkins, S.D.; Davis-Kean, P.E.; Eccles, J.S. (2006). Math and science motivation: a longitudinal examination of the links between choices and beliefs. *Developmental Psychology*, 42, 70-83.
- Singer, E., & Frankel, M.R. (1982). Informed consent procedures in telephone interviews. *American Sociological Review*, 47, 416-427.
- Siu, K.W.M. (2001). What should be solved? *The Korean Journal of Thinking and Problem Solving*, 11, 2, 9-22.
- Smilansky, J. (1984). Problem solving and the quality of invention: an empirical investigation. *Journal of Educational Psychology*, 76, 377-386.

- Smith, D. (1996). A meta-analysis of student outcomes attributable to teaching science as inquiry as compared to traditional methodology. Unpublished doctoral dissertation, Temple University, Philadelphia.
- Sony Corporation. (2005). Digital voice editor version 2.31 [Computer software]. New York: Sony Corporation of America.
- Spradley, J.P. (1979). *The ethnographic interview*. New York: Holt, Rinehardt, & Winston.
- Stake, R.E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications.
- Starko, A.J. (2007). Teaching problem finding to elementary students: views from the trenches. In B. M. Shore, M. W. Aulls, & M. A. B. Delcourt (Eds.), *Inquiry in education volume II: Overcoming barriers to successful implementation*. Mahwah, NJ: Erlbaum.
- Sternberg, R.J. (2001). Giftedness a developing expertise: A theory of the interface between high abilities and achieved excellence. *High Ability Studies*, 12, 159-179.
- Subotnik, R.F. (1988). Factors from the structure of intellect model associated with gifted adolescents' problem finding in science: research with Westinghouse Science Talent Search winners. *Journal of Creative Behavior*, 22, 1, 42-54.
- Subotnik R.F., & Steiner, C.L. (1994). Problem identification in academic research: a longitudinal case study from adolescence to early adulthood. In M. A. Runco (Ed.), *Problem finding, problem solving, and creativity*. Norwood, NJ: Ablex Publishing Company.
- Suwa, M. (2003). Constructive perception: Coordinating perception and conception toward acts of problem-finding in a creative experience. *Japanese Psychological Research*, 45, 221-234.

- Torrance, E.P. (1965). *Rewarding creative behavior: experiments in classroom creativity*. Englewood Cliffs, NJ: Prentice-Hall.
- Treffinger, D.J., Isaksen, S.G., & Dorval, K.B. (2005). Creative problem solving (CPS Version 6.1™): A contemporary framework for managing change. Retrieved March 23, 2008 from <http://www.creativelearning.com/PDF/CPSVersion61.pdf>
- Treffinger, D., Tallman, M., & Isaksen, S.C. (1994). Creative problem solving: An overview. In M.A. Runco (Ed.), *Problem finding, problem solving, and creativity*. Norwood, NJ: Ablex Publishing Company.
- Tytler, R. (1992). Independent research projects in school science: Case studies of autonomous behavior. *International Journal of Science Education*, 14, 393-411.
- Van Kaam, A. (1959). Phenomenal analysis: Exemplified by a study of the experience of “really feeling understood.” *Journal of Individual Psychology*, 15, 66-72.
- Wakefield, J.F. (1985). Towards creativity: problem finding in a divergent-thinking exercise. *Child Study Journal*, 15, 265-270.
- Walker, J. (1979). Physics at the International Science and Engineering Fair. *Physics Teacher*, 17, 462-463.
- Wallace, C.S., & Kang, N-H. (2004). An investigation of experienced secondary science teachers’ beliefs about inquiry: an examination of competing belief sets. *Journal of Research in Science Teaching*, 41, 936-960.
- Washton, N.S. (1967). Teaching science creatively: a taxonomy of pupil questions. *Science education*, 51, 428-431.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York: Cambridge University Press.

- Windschitl, M. (2004). Folk theories of “inquiry:” how preservice teachers reproduce discourse and practices of an atheoretical scientific method. *Journal of Research in Science Teaching, 41*, 481-512.
- Yoshioka, T., Suganuma, T., Tang, A.C., Matsushita, S., Manno, S., & Kozu, T (2005). Facilitation of problem finding among first year medical school students undergoing problem-based learning. *Teaching and Learning in Medicine, 17*, 136-141.
- Yulo, R.J. (1967). An exploration of the Flanders system of interaction analysis as a supervisory device with science interns. Unpublished doctoral dissertation, Harvard University, Cambridge, MA.
- Zohar, A., & Dori, Y.J. (2003). Higher order thinking skills and low-achieving students: Are they mutually exclusive? *The Journal of the Learning Sciences, 12*, 145-181.