REFERENCES

- Abdurrahman, Liliasari, A. Rusli, Dan Bruce Waldrip. 2011. "Implementasi Pembelajaran Berbasis Multi Representasi Untuk Peningkatan Penguasaan Konsep Fisika Kuantum". Cakrawala Pendidikan, Februari 2011, Th. XXX, No. 1
- Ainsworth, S. 1999. "The Functions of Multiple Representations". Computers & Education, 33, 131-152.
- Angell, C,o. Guttersrud, dan E.K. Henriksen. 2007 "Multiple representations as a framework for a modelling approach to physics education"
- Carolan, J., Prain, V. & Waldrip, B. (2008). "Using representations for teaching and learning in science". Teaching Science, 54 (1), 18-23.
- College Board. 2008. "Multiple Representations of Knowledge: Mechanics and Energy." online: www.collegeboard.com (Accessed on August 15, 2013)
- Creswell, J.W & Clark, V.P. 2007. "Designing and Conducting Mixed Methods Research". Thousand Oaks, CA: Sage.
- Creswell, JW. 2012. "Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research". Boston: Pearson
- Dilworth, John. 2004. 'Internal versus External Representation. The Journal of Aesthetics and Art Critism" 62:1 Winter 2004
- Etkina, Eugenia & Alan Van Heuvelen. 2004. "Investigative Science Learning Environment." Published in Forum on Education of the American Of the American Physical Society, 2004, spring issue, 12-14
- Gilbert, John K & David Treagust. 2009. "Models and Modeling in Science Education: Multiple Representations in Chemical Education." United Kingdom: Springer
- Hake, R. Richard., 1997. "Interactive-engagement versus traditional methods: A six-thousand-student survey of mechanics test data for introductory physics courses". Am. J. Phys., Vol. 66, No. 1, January 1
- Hubber, Peter. 2013. "Engaging students in new technologies using a representation construction pedagogy." Proceeding of HETL Conference, Orlando Florida, USA, Jan 13-15, 2013
- Kohl, P.B., Rosengrant, D., & Finkelstein, N.D. 2007. "Strongly and Weakly Directed Approaches to Teaching Multiple Representation Use in Physics". Physical Review Special Topiks-Physics Education Research, 3, 010108
- McMillan, H.James., & Sally Schumacher. 2001. Research in Education: A Conceptual Introduction". United States: Addison Wesley Longman, Inc.

- Peirce, C. (1931-58). "Logic as Semiotic: The Theory of Signs. In Justus Buchler (Ed.) Philosophical Writings of Peirce (1893-1910)"; reprint, New York: Dover, 1955), pp. 98-119.
- Prain, V., & Waldrip, B. 2006. "An Explanatory Study of Teachers' and Students' Use of Multi-modal Representations of Concepts in Primary Science." International Journal of Science Education Vol. 28, No. 15, 15 December 2006, pp. 1843-1866
- Prain, V., Tytler, R., & Peterson, S. 2009. "Multiple Representation in Learning About Representation. International Journal of Science Education". Vol. 31, No. 6, 1 April 2009, pp. 787-808
- Prain, V., Cox,P., Deed,C., Dorman, J., Edwards, D., Farrelly, C., Keeffe, M., Lovejoy,V., Mow, L. Sellings, P., Waldrip, B., Yager, Z.2012. "Personalised Learning: Lessons to be learnt". British Education Research Journal. Retrieved June 4, 2013 from http://www.tandfonline.com/doi/full/10.1080/01411926.2012.669747
- Rosengrant, D., Etkina, E., & Heuvelen, A, 2008. "An Overview of Recent Reesearch on Multiple Representations". Supported in part by NSF grants DUE 0241078, DUE 0336713
- Salkind, J.Neil. 2010. "Encyclopedia of Research Design". Online ISBN: 9781412961288 available onhttp://dx.doi.org/10.4135/9781412961288[accessed on August 31, 2014]
- Schnotz, Wolfgang & Richard Lowe., 2003. "Introduction External and internal representations in multimedia learning". Learning and Instruction Journal 13 .2003. 117-123. www.elsevier.com/locate/learninstruc [Accessed September 1, 2014]
- Tytler, Russel, Vaughan Prain, Petter Hubber and Bruce Waldrip. 2013. "Constructing Representation to Learn in Science". Australia: Sence Publisher
- Van Heuvelen, A. & Zou, X.L. 2000. "Multiple Representations of Work-Energy Processes". American Journal of Physics, 69 (2), 184.
- Waldrip, B. & Prain, V. 2006. "Changing representations to learn primary science concepts". Teaching Science, 54(4), 17-21.
- Waldrip, B, Prain, V & Carolan, J. 2006. "Learning Junior Secondary Science through MultiModal Representations". Electronic Journal of Science Education, 11 (1), 86-105.
- Waldrip, B. 2008. "Improving learning through use of representations in science". Proceeding The 2nd International Seminar on Science Education. Science Education Program. Bandung: Graduate School Indonesia University of Education.
- Waldrip, B., Prain, V., & Carolan, J. 2010. "Using Multi-Modal Representations to Improve Learning in Junior Secondary Science". Res. Science Education, 40, 65-80

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- Waldrip, B.G., Prain, V. & Sellings, P. 2012. "Explaining Newton's laws of Motion: Using student reasoning Through representations to develop conceptual understanding Instructional Science". DOI: 10.1007/s11251-012-9223-8
- Waldrip, B., Cox, P., Deed, C., Dorman, J., Edwards, D., Farrelly, C., Keefe, M., Lovejoy, V, Mow, L., Prain, V., Sellings, P., & Yager, Z. (2012, in press). "Student Perceptions of personalised Learning: Validation and Development of Questionnaire with regional secondary students. Learning Environments Research".
- Weil, Marsha., & Bruce Joyce., "Social Models of Teaching: Expanding Your Teaching Repretoire". 1978. New Jersey: Pretice-Hall, Inc.
- Wiersma, William & Stephen G. Jurs. 1990. "Educational Measurement and Testing". 1990. Massachussets: Allyn and Bacon