

## **Bibliografía**

- Abu–Mostafa , Y., Malik Magndon-Ismail & Hsuan-Tien Linl (2012) *Learning from data. A short course*. Pasadena CA: AMLbook. com
- Alpaydin, E. (2010) *Introduction to Machine Learning*. Cambridge, MA: MIT Press
- Altshuller, G., (1984) *Creativity as an Exact Science*. Gordon and Branch Publishers.
- Ashby, R. (1957) *An Introduction to Cybernetics*. London: Chapman & Hall Ltd.
- Ashby, G., Quellet, S. & Berretty, P. (1999) *On the dominance of unidimensional rules in unsupervised categorization*. Perception and Psychophysics. Vol. 61 (pp. 1178 – 1199)
- Atkin J., Karplus R. (1962) *Discovery or invention?* Science Teaching. Vol. 29. (p. 45).
- Ausubel, D. (2002) *Adquisición y retención del conocimiento. Una perspectiva cognitiva*. Barcelona: Paidós.
- Bartra, R. (2010) *Antropología del cerebro: La conciencia y los sistemas simbólicos*. México: Fondo de Cultura Económica.
- Bartra, R. (2013) *Cerebro y libertad. Ensayo sobre la moral, el juego y el determinismo*. México: Fondo de Cultura Económica.
- Ben–Eli, M. (1979) *Why is managing change difficult?*
- Bennett, K. & Campbell, C. (2000) *Support Vector Machines: Hype or Hallelujah?* SIGKDD Explorations. Vol. 2 No. 2
- Bochman, A. (2011) *Nonmonotonic Reasoning*.
- Bodhi, B. (1999) *Compendio del Abhidhamma. El Abhitammattha Sangaha de Anuruddha*. Ed. basado en Mahatera Narada. Traducción de U Nandisena. México: El Colegio de México.
- Bottou, L. & Lin, C. (2006) *Support Vector Machine Solvers*.
- Bousquet, O., Boucheron, S. & Ligosi, G., (2004) *Introduction to Statistical Learning Theory*.
- Bowdle, B. & Gentner, D. (2005) *The Career of Metaphor*. Psychological Review. Vol 112 No. 1 (pp. 193 – 216)
- Bransford, J., Brown, A. & Cocking R (Editors) (2000) *How People Learn. Brain, Mind, Experience and School*. National Research Council. Washington DC: National Academy Press.
- Brewka et al (2008) *Non-monotonic Reasoning*. In Van Harmelen, V. Lifshitz & B. Porter (Eds.) *Handbook of Knowledge Representation*. Elsevier.
- Bybee R., Taylor J., Gardner A., Van Scotter P., Powell J., Westbrook A., Landes N. (2006) *The BSCS 5E instructional model: origins, effectiveness, and applications*. Colorado Springs: BSCS. 2006.  
[http://science.education.nih.gov/houseofreps.nsf/b82d55fa138783c2852572c9004f5566/\\$FILE/Appendix%20D.pdf](http://science.education.nih.gov/houseofreps.nsf/b82d55fa138783c2852572c9004f5566/$FILE/Appendix%20D.pdf) [verificado 15 de mayo 2012].

- Byers, W. (2007) *How Mathematicians Think. Using Ambiguity, Contradiction and Paradox to Create Mathematics*. Princeton University Press.
- Campbell, C. (2002) *Kernel Methods: A Survey in Current Techniques*. Neurocomputing, Vol. 48 (pp. 63 – 84)
- Carnap, R. (1960). *Fundamentos Lógicos de la Probabilidad*. ¿Carnap, R., 1962 Logical Foundations of Probability, University of Chicago Press, p. 4. On line?
- Changeux, J–P (2005) *El hombre de verdad*. México: Fondo de Cultura Económica.
- Chen, J. (2010) *The Physical Foundation of Economics: An Analytical Thermodynamical Theory*.
- Chen, J. *The Entropy Theory of Mind and Behavioral Finance*.  
<http://web.unbc.ca/~chenj/>
- Chi, M. (2005) *Commonsense Conceptions of emergent processes: why some misconceptions are robust*. Journal of Learning Sciences. Vol. 14 No.2 (pp. 161 – 199)
- Clayton, M. (1997) *Delphi: A technique to harness expert opinion for critical decision-making tasks in education*. Educational Psychology. Vol. 17 (pp. 373 – 386)
- Colón, H. (1947) *Vida del Almirante Don Cristóbal Colón*. México: Fondo de Cultura Económica.
- Conant y Ashby (1956) *Todo buen regulador es un buen modelo del sistema. Teorema de la variedad requerida*.
- Cortés, C. & Vapnik, V., (1995) *Support Vector Networks*. Machine Learning, Vol. 20 (pp. 1455 – 1480)
- Cortés, H. (1994) *Cartas de Relación*. México: Editorial Porrúa.
- Cristianini, N., Shawe-Taylor, J., Elisseeff, A. & Kandola, J. (2000) *On Kernel-Target Alignment*. Cambridge UK: Cambridge University Press
- Dávila-Flores, J. D (2014) *El Tesoro de la Capitana*. En revisión. México, D.F.: Base de datos.
- De Bono, E. (1970). *Lateral thinking : creativity step by step*. New York: Harper & Row.
- De Sánchez, M. (1991) *Desarrollo de Habilidades del Pensamiento. Procesos Básicos del Pensamiento*. México: Trillas.
- Dewey, J. (1989) *Cómo pensamos. Nueva exposición de la relación entre pensamiento y proceso educativo*. México: Ediciones Paidós.
- Díaz del Castillo, B. (1972) *Historia Verdadera de la Conquista de la Nueva España*. México: Editorial Porrúa.
- Díaz del Castillo, B. (1974) *Historia Verdadera de la Conquista de la Nueva España*. México: Editorial Porrúa.
- Driankov, D., Hellendorn, H., Reinfrank, M. (1996) *An Introduction to Fuzzy Control*. New York NY: Springer-Verlag.
- Ertekin, S., Huang, J., Bottou, L. & Lee, C. (2007) *Learning on the border: Active Learning in Imbalanced Data Classification*. CIKM. Noviembre 6 – 8. Lisboa.

Felder, R. & Brent, R. (2005) *Understanding Student Differences*. Journal of Engineering Education. Vol. 94 No. 1 (pp. 57 – 72).

Felder, R. & Silverman, L. (1988) *Learning and Teaching Styles in Engineering Education*. Journal of Engineering Education. Vol. 78 No. 7 (pp. 674 – 681).

Figueroa, J., González, E. y Solís, V. (1981) *Una aproximación al problema del significado: las redes semánticas*. Revista Latinoamericana de Psicología. Vol 13 N° 3 (pp 447 – 458)

Fink, L. D. (2003) *A Self-Directed Guide to Designing Courses for Significant Learning*. Extracto de *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. San Francisco: Jossey-Bass.

Fotheringham, A. & Wegener, M. (Eds.) (2000) *Spatial Models and GIS: New Potencial and New Models*. London: Taylor & Francis.

Galison, P. . (1994) *The Ontology of the Enemy: Norbert Wiener and the Cybernetic Vision*. Critical Inquiry. Vol. 21, No. 1 (pp. 228 – 266)

García Icazbalceta, J. (1999) *Colección de documentos para la historia de México*. México: Antigua Librería. Edición digital: Biblioteca Virtual Miguel de Cervantes.  
<http://www.cervantesvirtual.com/obra/coleccion-de-documentos-para-la-historia-version-actualizada-0>  
[Acceso verificado 14 de abril de 2014.

Garduño, L. (1999) *Hacia un modelo de evaluación de la calidad de instituciones de educación superior*. Revista Iberoamericana de Educación. No. 21. Puede consultarse en línea:  
<http://www.rieoei.org/rie21a06.htm>

Harman, G. & Kulkarni, S. (2007) *Reliable Reasoning. Induction and Statistical Learning*. Cambridge, MA: MIT Press.

Hartley, R. (1928) *Transmission of information*. Bell System Technical Journal.

Henderson, K. & Pingry, R. (1953). *Problem solving in mathematics*. In H. F. Fehr (Ed.), *The learning of mathematics: Its theory and practice*. 21st Yearbook of the National Council of Teachers of Mathematics. (pp. 228 – 270).

Hestenes, D. (1992) Modeling games in the Newtonian world. American Journal of Physics, Vol. 60 (pp. 732–748)

Hestenes, D. (1999) *New Foundations for Classical Mechanics*. Dordrecht/Boston: Reidel, Kluwer

Hestenes, D. (2003) Oersted Medal Lecture 2002: *Reforming the mathematical language of physics*. American Journal of Physics, Vol. 71 (pp. 104–121). Available at the Geometric Calculus website:  
<http://modelingnts.la.asu.edu>

Hestenes, D. (2007). *Notes for a modeling theory of science. Cognition and physics education*. In A.L. Ellermeijer (Ed.), *Modelling in Physics and Physics Education*. Available at the Modeling Instruction website: <http://modeling.asu.edu>.

Hestenes, D., (2010) *Modeling Theory for Math and Science Education*. Ch. 3 in *Modeling Students' Mathematical Modeling Competencies*. New York: Springer (p. 18)

Hirtz, J. et al, (2002) *A Functional Basis for Engineering Design: Reconciling and Evolving Previous Efforts*. National Institute for Standards and Technology, Note 1447. Washington DC

- Hofstadter, D. (1979) *Godel, Escher, Bach: An Eternal Golden Braid. A Metaphorical Fugue on Minds and Machines in the Spirit of Lewis Carroll*. New York: Basic Books.
- Hubka, V. & Ernst Eder, W. (1984) *Theory of Technical Systems*. Berlin: Springer-Verlag
- Hundal, M. (1990) *A Systematic Method for Developing Function Structures, Solutions and Concept Variants*. Mechanism and Machine Theory Vol. 25 No 3 (pp. 243 – 256)
- Johnson, D., Johnson, R. y Holubec, E. (1999) *El Aprendizaje Cooperativo en el Aula*. Barcelona: Paidós.
- Jonassen, D. (2004) *Handbook of Research on Educational Communications and Technology*
- Jonassen D. (2011) *Learning to solve problems. A Handbook for Designing Problem– Solving Learning Environments*. New York: Routledge
- Kant, I. (1787) *The Critique of Pure Reason*. The Project Gutenberg EBook of. Accesible en URL: <http://www.gutenberg.org/files/4280/4280-h/4280-h.htm>
- Kecman, V. (2004) *Support Vector Machines Basics*. School of Engineering Report 616. The University of Auckland. Auckland, New Zealand.
- Kelley, J. (1991) *Juan Ponce de León's Discovery of Florida: Herrera's Narrative Revisited*. Revista de Historia de América. Vol. 3. <http://www.jstor.org/stable/20139775> Verificado 31 de diciembre de 2013.
- Koch, P., Peplinski, J., Allen, J & Mistree, F. (1994) *A Method for Design Using Available Assets: Identifying a Feasible System Configuration*. Behavioral Science. Vol 30 (pp. 229 – 250)
- Las Casas, B. (2007) *Historia de las Indias. Tomos 1 a 5*. Madrid: Miguel Ginesta. Edición digital Alicante: Biblioteca Virtual Miguel de Cervantes.
- López de Gómara, F. (1964) *Historia General de las Indias. 2 Tomos. Volumen 2, Conquista de México*. Barcelona: Editorial Iberia.
- Makinson, D. (2005) *How to go nonmonotonic*. In *Handbook of Philosophical Logic*. D. Gabbay & F. Guenther (Eds.). Netherlands: Springer. (pp. 175 – 278).
- Mártir de Anglería, P. (1965) *Décadas del Nuevo Mundo. 2 Tomos*. México: Editorial Porrúa.
- Martínez, J. L. (1992) *Documentos Cartesianos. 4 Volúmenes*. México: Fondo de Cultura Económica.
- Mercer, J. (1909) *Functions of positive and negative type, and their connection with the theory of integral equations*.
- Moscovici, S. (1961) *El Psicoanálisis, su imagen y su público*. Buenos Aires: Huemul, 1979.
- Novak, D. (1998) *Learning Science and the Science of Learning*. Studies in Science Education. Vol. 15 (pp. 77 – 101)
- Novak, J. & Gowin, D. (1984) *Learning How To Learn*. New York: Cambridge University Press.
- Nguyen., Q. (2011) *Kernel Methods*.
- Otto, K. & Wood, K. (2000) *Product Design. Techniques in reverse engineering and new product development*. Prentice-Hall.
- Pahl, G. & Beitz, W. (1988) *Engineering Design: A Systematic Approach*, Berlin: Springer-Verlag

Pask, G. (1979) *Against conferences or The poverty of reduction in Social or Psychological Sciences and POP systems.*

Pask, Scott y Kallikourdis, (1973; 1975) *Teoría de la Conversación. A Domain Independent Model of Human Knowledge.* Foundations of Science. (reEd. 2001)

Pea, R. (2004) *The Social and Technological Dimensions of Scaffolding and Related Concepts for Learning, Education and Human Activity.* The Journal of the Learning Sciences. Vol. 13 No. 3 (pp. 423 - 451)

Pellegrino, J., Chudowski, N. & Glaser, R. (Editors) (2003) *Knowing what students know. The Science and Design of Educational Assessment.* National Research Council. Washington DC: National Academy Press

Piaget, J. (1977) *The development of thought: Equilibration of cognitive structures.* New York: Viking Press.

Prince, M. & Felder, R. (2007) *The Case for Inductive Teaching.* ASEE Prism Vol. 17 No. 2.

Poincaré, H. (1904)

Ramachandran, V. (1998, 2004) (2011) *The Tell-Tale Brain. A Neuroscientist's Quest for What Makes Us Human.* New York: Norton.

Reitman, Walter (1965) *Cognition and thought. An information processing approach.* New York: J. Wiley

Reyes, C. . (1986) *Neighborhood Models: An Alternative for the modeling of spatial structures.* PhD Thesis. Simon Fraser University.

Sánchez-Sandoval, R., (2006) *Reflexiones sobre un modelo geoespacial para la Investigación terrestre: El caso de México.* Tesis de Maestría en Geomática. Centro Ing. Jorge L. Tamayo. Conacyt.

Scholkopf, B. et al (1998) *Advances in Kernel Methods – Support Vector Learning,* Cambridge USA: MIT Press

Schohn & Cohn (2000) *Less is more: Active Learning with Support Vector Machines.*

Scholten, D. (2009) *Every good key must be a model of the lock it opens. The Conant & Ashby Theorem Revisited.* [www.goodregulator.org](http://www.goodregulator.org)

Sewell, M. (2009) *Kernel Methods.*

Shannon, C. . (1948) *A Mathematical Theory of Communication.* The Bell Systems Technical Journal, Vol. 27 (pp. 379 – 423, 623 – 656)

Stone & Wood (2000) *Development of a Functional Basis for Design.* Journal of Mechanical Design. Transactions of ASME Vol. 122, December (pp. 359 – 370)

Streveler, R., Miller, R., Santiago-Román, A., Nelson, M., Geist, M. & Olds, B. (2011) *Rigorous Methodology for Concept Inventory Development: Using the “Assessment Triangle” to Develop and Test the Thermal and Transport Science Concept Inventory (TTCI).* International Journal of Engineering Education. Vol. 27 No. 5 (pp. 968 – 984)

Szykman, S., Racz, J. & Sriram, R. (1999) *The Representation of Function in Computer-Based Design.* Proc. of the 1999 ASME Design Engineering Technical Conferences.

Tardif, J. (2008) *Desarrollo de un programa por competencias: De la intención a su implementación*. Profesorado. Revista de curriculum y formación del profesorado. Vol. 12 No. 3 Accesible en <http://www.ugr.es/local/recfpro/rev123ART2.pdf>

Ulrich & Eppinger (1995) *Product Design and Development*. McGraw-Hill College

Van der Hoek & Wooldridge (2003) *Towards a Logic of Rational Agency*. L.J. of the IGPL Vol. 11 No. 2 (pp 133 – 157)

Varela, J. (1992) *Antón de Alaminos. Piloto del Caribe*. Palos de la Frontera: Exelentísimo Ayuntamiento.

Von Glasersfeld, E. (1988) *The Reluctance to change a way of thinking*. Irish Journal of Psychology, Vol. 9, No. 1

Von Foerster, H. (1991) *Ethics and Second Order Cybernetics*. American Society of Cybernetics. Paris.

Vygotsky, L. (1978) *Mind and Society. The Development of higher psychological processes*. Harvard University Press.

Watzlavick, P., Weakland, J. & Fisch, R. (1974) *Change*. New York: Norton (pp. 10 – 11)

Wertsch, J. (1985) *Vygotsky and the social formation of mind*. Cambridge MA: Harvard University Press.

Wiener, N., Rosenblueth, A. & Bigelow (1943) *Behavior, Purpose and Teleology*. Philosophy of Science. Vol. 10 Issue 1 (pp. 18 – 24)

Wiener, N. (1948) *Cybernetics: or Control and communication in the animal and the machine*. Cambridge, MA: The MIT Press.

Wiener, N. (1989) *The Human Use of Human Beings. Cybernetics and Society*. Great Britain: Bookcraft, Midsomer Norton, Avon. Accesible: <http://21stcenturywiener.org/wp-content/uploads/2013/11/The-Human-Use-of-Human-Beings-by-N.-Wiener.pdf>

Wiggins, G. & McTighe J. (1998) *Understanding by design*. Alexandria, VA: Association for Supervision and Curriculum Development.