

## Referencias

1. Spencer FC. Teaching and measuring surgical techniques. The technical evaluation of competence. *Bull Am Coll Surg* 1978; 63: 9-12.
2. Satava RM, Gallagher AG, Pellegrini CA. Surgical competence and surgical proficiency: definitions, taxonomy, and metrics. *J Am Coll Surg* 2003; 196: 933- 937.
3. Hamdorf JM, Hall JC. Acquiring surgical skills. *Br J Surg* 2000; 87: 28-37.
4. Francis NK, Hanna GB, Cresswell AB, Carter FJ, Cuschieri A. The performance of master surgeons on standard aptitude testing. *Am J Surg* 2001; 182: 30-33.
5. Satava RM, Cuschieri A, Hamdorf JM. Metrics for objective assessment: preliminary summary of the Surgical Skills Consensus Workshop. *Surg Endosc* 2003; 17: 220- 226.
6. Wanzel KR, Ward M, Reznick RK. Teaching the surgical craft: from selection to certification. *Curr Probl Surg* 2002; 39: 576- 659.
7. Secretaría de Salud. *Salud: México 2001. Informe para la rendición de cuentas.* México D.F: Secretaría de Salud, 2002.
8. Ramírez-Sánchez TJ, Nájera-Aguilar P, Nigenda-López G. Percepción de la calidad de la atención de los servicios de salud en México: perspectiva de los usuarios. *Salud Pública Méx* 1998; 40:3-12.
9. Senge PM, Roberts C, Ross RB, Smith BJ, Kleiner A. *La quinta disciplina en la práctica. Cómo construir una organización inteligente.* Barcelona: Granica, 1999; pp. 52-53.

10. Carretero M. Constructivismo y educación. Zaragoza: Edelvives, 1993; pp. 21.
11. Díaz-Barriga Arceo F, Hernández-Rojas G. Estrategias docentes para un aprendizaje significativo. Una interpretación constructivista. 2ª.ed. México: McGraw-Hill/Interamericana, 2002; pp. 2- 62.
12. Tyler S. The manager's good study guide. 2<sup>nd</sup>. Ed. London: The Open University, 2004; pp. 6- 20.
13. Lave J, Wenger E. Situated learning: legitimate peripheral participation. Cambridge: University Press, 1991.
14. Wenger E. Comunidades de práctica. Aprendizaje, significado e identidad. Barcelona: Paidós, 2001.
15. Sachdeva AK. Acquiring skills in new procedures and technology. The challenge and the opportunity. Arch Surg 2005; 140: 387- 389.
16. Georgopoulos AP. Neural aspects of cognitive motor control. Curr Opin Neurobiol 2000; 10: 238-241.
17. Pearce AJ, et al. Functional reorganisation of the corticomotor projection to the hand in skilled racquet players. Exp Brain Res 2000; 130: 238-241.
18. Rosenbaum DA, Carlson RA, Gilmore RO. Acquisition of intellectual and perceptual-motor skills. Annu Rev Psychol 2001; 52: 453- 470.
19. Gallagher AG, Ritter EM, Champion H, et al. Virtual reality simulation for the operating room. Proficiency-based training as a paradigm shift in surgical skills training. Ann Surg 2005; 241: 364-372.
20. Chitwood WRJr, Sabiston DCJr. Selected historical perspectives on the evolution of surgical science. En: Troidl H, McKneally MF, Mulder DS,

Wechsler AS, McPeck B, Spitzer WO, eds. Surgical research. Basic principles and clinical practice. 3<sup>rd</sup>.ed. New York: Springer-Verlag, 1998; pp. 23-38.

21. Ziv A, Wolpe PR, Small SD, Glick S. Simulation-based medical education: an ethical imperative. *Acad Med* 2003; 78: 783- 788.

22. Kohn LT, Corrigan JM, Donaldson MS. To err is human. Building a safer health system. Washington, D.C.: National Academy Press, 2000; pp. 155-201.

23. Champion H, Gallagher A. Simulation in surgery: a good idea whose time has come. *Br J Surg* 2003; 90: 767-768.

24. Byrne AJ, Pugsley L, Hashem MA. Review of comparative studies of clinical skills training Morrison Hospital, UK. *Med Teach*. 2008;30(8):764-7.

25. Xeroulis GJ, Park J, Moulton CA, Reznick RK, Leblanc V, Dubrowski A. Teaching suturing and knot-tying skills to medical students: a randomized controlled study comparing computer-based video instruction and (concurrent and summary) expert feedback. Department of Surgery, and the Wilson Centre for Research in Education, University of Toronto, Faculty of Medicine, CRE at the University Health Network, Toronto, Ontario, Canada. *Surgery*. 2007 Apr;141(4):442-9. Epub 2007 Jan 25.

26. Nousiainen M, Brydges R, Backstein D, Dubrowski A. Comparison of expert instruction and computer-based video training in teaching fundamental surgical skills to medical students. Department of Surgery and the Wilson Centre for Research in Education, University of Toronto, Faculty

- of Medicine, Toronto, Ontario, Canada. 2008 Apr;143(4):539-44. Epub 2008 Jan 30.
27. Thomas RE, Crutcher R, Lorenzetti D. Can J Surg. A systematic review of the methodological quality and outcomes of RCTs to teach medical undergraduates surgical and emergency procedures. Department of Family Medicine, University of Calgary, Calgary, Alta, Canada. [rthomas@ucalgary.ca](mailto:rthomas@ucalgary.ca) 2007 Aug;50(4):278-90.
28. Brandt MG, Davies ET. Visual-spatial ability, learning modality and surgical knot tying. Department of Otolaryngology, Schulich School of Medicine, University of Western Ontario, London. [mbrandt2005@meds.uwo.ca](mailto:mbrandt2005@meds.uwo.ca) Can J Surg. 2006 Dec;49(6):412-6.
29. Van Sickle KR, Smith B, McClusky DA 3rd, Baghai M, Smith CD, Gallagher AG. Evaluation of a tensiometer to provide objective feedback in knot-tying performance. Department of Surgery, University of Texas Health Science Center San Antonio UTHSCSA, San Antonio, Texas, USA. Am Surg. 2005 Dec;71(12):1018-23.
30. Rogers DA, Regehr G, Yeh KA, Howdieshell TR. Computer-assisted learning versus a lecture and feedback seminar for teaching a basic surgical technical skill. Department of Surgery, Medical College of Georgia, Augusta 30912-4070, USA. Am J Surg. 1998 Jun;175(6):508-10.
31. Van Sickle KR, Ritter EM, Baghai M, Goldenberg AE, Huang IP, Gallagher AG, Smith CD. Prospective, randomized, double-blind trial of curriculum-based training for intracorporeal suturing and knot tying. Department of Surgery, University of Texas Health Science Center at San Antonio, San

Antonio, TX 78229-3900, USA. J Am Coll Surg. 2008 Oct;207(4):560-8.  
Epub 2008 Jul 14.

32. Jim Huntzinger, The Roots of Lean, Training Within Industry: The origin of Japanese Management and Kaizen
33. Job Instruction. Sessions Outline and Reference Material. Training Within Industry Service Bureau of Training. WAR MANPOWER COMMISSION. Washington, D.C., 1944
34. Jim Huntzinger, Why Standar Work is not Standar: Training Within Industry Provides an Answer. Fourth Issue 2006
35. Sackett D. *The tactics of performing therapeutic trials*. En: Haynes RB, Sackett DL, Guyatt GH, Tugwell P. *Clinical Epidemiology*. 3<sup>rd</sup>. ed. Philadelphia: Lippincott Williams&Wilkins, 2006; pp. 66-172.
36. Brant R. *Inference for proportions: comparing two independent samples*. <http://stat.ubc.ca/~rollin/stats/ssize/b2.html> (acceso efectuado el 20 marzo del 2011).
37. Diagrama de flujo de las participantes del estudio. CONSORT 2010 guidelines (<http://www.consort.statement.org>).
38. Donal A. Dinero Training within Industry. The foundation of lean. Productivity Press. New York, New York. 2005
39. Lawden MC. An investigation of the ability of the human visual system to encode spatial phase relations. Vision Res 1983; 23: 457- 467.
40. Peters M, Laeng B, Latham K, Jackson M, Zaiyouna R, Richardson C. A redrawn Vandenburg and Kuse mental rotations test: different versions and factors that affect performance. Brain Cogn 1995; 28: 39- 58.