

المراجع

- Adam, K. P. (2001). *Computerized scoring of essays for analytical writing assessments: Evaluating score validity*. Seattle, WA: National Council on Measurement in Education. (ERIC Document Reproduction Service No. ED 458296).
- Aleven, V., Ashley, K. D., Lynch, C., & Pinkwart, N. (2008). *Intelligent tutoring systems for ill-defined domains: Assessment and feedback in ill-defined domains*. Proceedings of a workshop held during the 9th International Conference on Intelligent Tutoring Systems. Montreal, Canada, 2008.
- Anderson, J. R. (1995). *Learning and memory: An integrated approach*. New York: Wiley.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, 9(3), 75–78.
- Barley, Z., Lauer, P. A., Arens, S. A., Apthorp, H. S., Englert, K. S., Snow, D., & Akiba, M. (2002). *Helping at-risk students meet standards: A synthesis of evidence-based classroom practices*. Denver, CO: Mid-continent Research for Education and Learning.
- Bouffard, T., Boisvert, J., Vezeau, C., & Larouche, C. (1995). The impact of goal orientation on self-regulation and performance among college students. *British Journal of Educational Psychology*, 65(3), 317–330.
- Bransford, J., Brown, A., & Cocking, R. (2000). *How people learn: Brain, mind, experience, and school (Expanded ed.)*. Washington, DC: National Academies Press.
- Carpenter, S. K., Pashler, H., & Cepeda, J. (2009). Using tests to enhance 8th grade students' retention of U.S. history facts. *Applied Cognitive Psychology*, 23, 760–771.
- Chambers, B., Cheung, A. C. K., Madden, N. A., Slavin, R. E., & Gifford, R. (2006). Achievement effects of embedded multimedia in a Success For All reading program. *Journal of Educational Psychology*, 98(1), 232–237.
- Chen, Z. (1999). Schema induction in children's analogical problem solving. *Journal of Educational Psychology*, 91(4), 703–715.
- Cholmsky, P. (2003). *Why gizmos work: Empirical evidence for the instructional effectiveness of ExploreLearning's interactive content*. Charlottesville, VA: ExploreLearning. Retrieved March 15, 2006, from <http://www.explorelearning.com/View/downloads/>

WhyGizmosWork.pdf

- Consortium of College and University Media Centers. (1996). *Fair use guidelines for educational multimedia*. Retrieved January 12, 2012, from <http://www.adece.edu/admin/papers/fair10-17.html>
- Cooper, H., Robinson, J. C., & Patall, E. A. (2006). Does homework improve academic achievement? A synthesis of research, 1987-2003. *Review of Educational Research*, 76(1), 1-62.
- Dean, C., Hubbell, E. R., Pitler, H., & Stone, B. J. (2012). *Classroom instruction that works* (2nd ed.). Alexandria, VA: ASCD.
- Dodge, B., & March, T. (1995). *What Is a WebQuest?* Retrieved April 26, 2006, from <http://webquest.sdsu.edu/overview.htm>
- Elliot, E. S., McGregor, H. A., & Gable, S. L. (1999). Achievement goals, study strategies, and exam performance: A mediational analysis. *Journal of Educational Psychology*, 91, 549-563.
- Facebook. (n.d.). Statistics. Retrieved <http://www.facebook.com/press/info.php?statistics>
- Fico, M. (2005, June 1). Honoring student's voices. *Educator's eZine*. Retrieved March 17, 2006, from <http://www.techlearning.com/story/showArticle.jhtml?articleID=163105484>
- Fisch, K. (2006, August 15). [Blog post]. Did you know? The Fischbowl. Retrieved September 15, 2011, from <http://thefischbowl.blogspot.com/2006/08/did-you-know.html>
- Friedman, T. L. (2005). *The world is flat: A brief history of the twenty-first century*. New York: Farrar, Straus, and Giroux.
- Fuchs, L. S., Fuchs, D., Finelli, R., Courey, S. J., Hamlett, C. L., Sones, E. M., & Hope, S. (2006). Teaching third graders about real-life mathematical problem solving: A randomized controlled study. *Elementary School Journal*, 106, 293-312.
- Gee, J. P. (2009). Deep learning properties of good digital games: How far can they go? In Ritterfeld, U., Cody, M., Vorderer, P. (Eds.) *Serious games: Mechanisms and effects*. London: Routledge Publishers.
- Gentner, D., Loewenstein, J., & Thompson, L. (2003). Learning and transfer: A general role for analogical encoding. *Journal of Educational Psychology*, 95, 393-408.
- Gerlach, J. M. (1994). Is this collaboration? In Bosworth, K., and Hamilton, S. J. (Eds.), *Collaborative Learning: Underlying Processes and Effective Techniques, New Directions for Teaching and Learning*, 59.
- Greene, B. A., Miller, R. B., Crowson, H. M., Duke, B. L., & Akey, K. L. (2004). Predicting high school students' cognitive engagement and achievement: Contributions of classroom perceptions and motivation. *Contemporary Educational Psychology*, 29(4), 462-482.
- Hall, K. G., Domingues, D. A., & Cavazos, R. (1994). Contextual interference effects with skilled baseball players. *Perceptual and Motor Skills*, 78, 835-841.
- Halverson, R. (2005). What can K-12 school leaders learn from video games and gaming? *Innovate* 1(6). Retrieved March 14, 2006, from <http://www.innovateonline.info/>

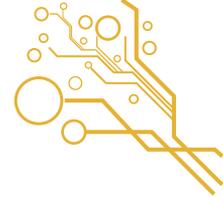
index.php?view=article&id=81

- Henderlong, J., & Lepper, M. R. (2002). The effects of praise on children's intrinsic motivation: A review and synthesis. *Psychological Bulletin*, 128, 774–795.
- High schools plug into online writing program. (2003, November 1). *District Administrator* 39 (11). Retrieved January 12, 2012, from http://findarticles.com/p/articles/mi_6938/is_11_39/ai_n28168501/
- Hill, J., & Flynn, K. (2006). *Classroom instruction that works with English language learners*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Holyoak, K. J. (2005). Analogy. In Keith J. Holyoak and Robert G. Morrison (Eds.). *The Cambridge Handbook of Thinking and Reasoning* (pp. 117–142).
- Hom, H. L., Jr., & Murphy, M. D. (1983). Low achiever's performance: The positive impact of a self-directed goal. *Personality and Social Psychology Bulletin*, 11, 275–285.
- Hong, E., Milgram, R. M., & Rowell, L. L. (2004). Homework motivation and preference: A learner-centered homework approach. *Theory into Practice*, 43, 197–204.
- Hsu, Y.-S. (2008). Learning about seasons in a technologically enhanced environment: The impact of teacher-guided and student-centered instructional approaches on the process of students' conceptual change. *Science Education*, 92(2), 320–344.
- Johnson, D. W., & Johnson, R. T. (2003). Student motivation in co-operative groups. In R. M. Gillies & A. F. Ashman (Eds.), *Co-operative learning: The social and intellectual outcomes of learning in groups* (pp. 136–176). New York: Routledge Falmer.
- Johnson, D. W., & Johnson, R. T. (2005). New developments in social interdependence theory. *Genetic, Social, and General Psychological Monographs*, 131(4), 285–358.
- Kamins, M. L., & Dweck, C. S. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology*, 35, 835–847.
- Karpicke, J. D., & Roediger, H. R. (2008). The critical importance of retrieval for learning. *Science*, 319, 966–968.
- Kendeou, P., Bohn-Gettler, C., White, M. J., & van den Broek, P. (2008). Children's inference generation across different media. *Journal of Research in Reading* 31(3), 259–272.
- Klopfer, E. (July/August 2005). Playing to learn: state-of-the-art computer games go to school. *Access Learning*. Retrieved March 14, 2006, from http://www.ciconline.org/AboutCIC/Publications/Archives/HL_julaug05.htm
- Kohn, A. (2006). *The homework myth: Why our kids get too much of a bad thing*. Cambridge, MA: Da Capo Press.
- Kriz, W., & Eberle, T. (2004). *Bridging the gap: Transforming knowledge into action through gaming and simulation*. Proceedings of the 35th Conference of the International Simulation and Gaming Association (ISAGA). Munchen, Germany.
- Kulik, J. A., & Kulik, C. C. (1988). Timing of feedback and verbal learning. *Review of Educational Research*, 58, 79–97.
- Lefrancois, G. R. (1997). *Psychology for teaching* (9th ed.). Belmont, CA: Wadsworth.

- Li, R., & Liu, M. (2007). Understanding the effects of databases as cognitive tools in a problem-based multimedia learning environment. *Journal of Interactive Learning Research*, 18(3), 345–363.
- Lobel, J. (2006). *Multiplayer computer gaming simulations facilitating cooperative learning*. Dublin, Ireland: IT in Education, Trinity College Dublin.
- Lucas, G. (2005, November 17). [Podcast] George Lucas and the new world of learning. *Eduto-pia Radio Show*. Retrieved August 28, 2006, from <http://www.edutopia.org/php/radio.php>
- Martorella, P. H. (1991). Knowledge and concept development in social studies. In J. P. Shaver (Ed.), *Handbook of research on social studies teaching and learning* (pp. 370–399). New York: McMillan.
- Marzano, R. J. (1998). *A theory-based meta-analysis of research on instruction*. Aurora, CO: McREL. Retrieved February 7, 2006, from <http://www.mcrel.org/instructionmetaanalysis>
- Marzano, R. J. & Pickering, D. J. (1997). *Dimensions of learning teacher's manual* (2nd ed.). Alexandria, VA: ASCD, and Denver, CO: McREL.
- Marzano, R. J. & Pickering, D. J. (2007). Special topic: The case for and against homework. *Educational Leadership* 64(6), p. 74–79.
- Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: ASCD.
- McDaniel, M. A., Roediger, H. L., III, & McDermott, K. B. (2007). Generalizing test-enhanced learning from the laboratory to the classroom. *Psychonomic Bulletin & Review*, 14(2), 200–206.
- Medina, J. (2008). *Brain rules: 12 principles for surviving and thriving at work, home, and school*. Seattle, WA: Pear Press.
- Minotti, J. L. (2005). Effects of learning-style-based homework prescriptions on the achievement and attitudes of middle school students. *NASSP Bulletin*, 89, 67–89.
- Mize, C. D., & Gibbons, A. (2000). More than inventory: Effective integration of instructional technology to support student learning in K–12 schools. (ERIC Document Reproduction Service No. ED 444563).
- Moore-Partin, T. C., Robertson, R. E., Maggin, D. M., Oliver, R. M., & Wehby, J. H. (2010). Using teacher praise and opportunities to respond to appropriate student behavior. *Pre-venting School Failure*, 54(3), 172–178.
- Morgan, R. L., Whorton, J. E., & Gunsalus, C. (2000). A comparison of short term and long term retention: Lecture combined with discussion versus cooperative learning. *Journal of Instructional Psychology* 27(10), 53–58.
- Newell, A., & Rosenbloom, P. S. (1981). Mechanisms of skill acquisition and the law of practice. In J. R. Anderson (Ed.), *Cognitive skills and their acquisition*. Hillsdale, NJ: Erlbaum.
- Nielson, L., & Webb, W. (2011). *Teaching generation text: Using cell phones to enhance learning*. San Francisco: Jossey-Bass.

- Page, M. S. (2002). Technology–enriched classrooms: Effects on students of low socioeconomic status. *Journal of Research on Technology in Education*, 34(4), 389–409.
- Pashler, H., Rohrer, D., Cepeda, N. J., & Carpenter, S. K. (2007). Enhancing learning and retarding forgetting: Choices and consequences. *Psychonomic Bulletin and Review*, 14(2), 187–193.
- Phan, H. P. (2009). Exploring students' reflective thinking practice, deep processing strategies, effort, and achievement goal orientations. *Educational Psychology*, 29(3), 297–313.
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research and applications* (2nd ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Prensky, M. (2000). *Digital game–based learning*. New York: McGraw–Hill.
- Reeves, T. (1998). *The impact of media and technology in schools*. Athens: University of Georgia. Research report for The Bertelsmann Foundation. Retrieved March 30, 2006, from http://www.athensacademy.org/instruct/media_tech/reeves0.html
- Ringstaff, C., & Kelley, L. (2002). *The learning return on our education technology investment: A review of findings from research*. San Francisco: WestEd RTEC.
- Rivet, A. E., & Krajcik, J. S. (2004). Achieving standards in urban systemic reform: An example of a sixth grade project–based science curriculum. *Journal of Research in Science Teaching*, 41(7), 669–692.
- Rohrer, D., & Taylor, K. (2007). The shuffling of mathematics practice problems boosts learning. *Instructional Science*, 35, 481–498.
- Rohrer, D., Taylor, K., & Sholar, B. (2010). Tests enhance the transfer of learning. *Journal of Experimental Psychology*, 36(1), 233–239.
- Roseth, C. J., Johnson, D. W., & Johnson, R. T. (2008). Promoting early adolescents' achievement–ment and peer relationships: The effects of cooperative, competitive, and individualistic goal structures. *Psychological Bulletin*, 134(2), 223–246.
- Russell, J., & Sorge, D. (1999). Training facilitators to enhance technology integration. *Journal of Instruction Delivery Systems*, 13(4), 6.
- Schacter, J. (1999). *The impact of education technology on student achievement: What the most current research has to say*. Santa Monica, CA: Milken Exchange on Education Technology.
- Schacter, J., & Fagnano, C. (1999). Does computer technology improve student learning and achievement? How, when, and under what conditions? *Journal of Educational Computing Research*, 20(4), 329–343.
- Schaffhauser, D. (2009, August). *The vod couple*. *T.H.E. Journal*, 36(7). Retrieved April 5, 2012, from <http://thejournal.com/Articles/2009/08/09/Vodcasting.aspx?Page=1>
- Schroeder, C. M., Scott, T. P., Tolson, H., Huang, T.–Y., & Lee, Y.–H. (2007). A meta–analysis of national research: Effects of teaching strategies on student achievement in science in the United States. *Journal of Research in Science Teaching*, 44(10), 1436–1460.
- Schunk, D. H. (2003). Self–efficacy for reading and writing: influence of modeling,

- goal setting, and self–evaluation. *Reading & Writing Quarterly*, 19, 159–172.
- Siegle, D., & Foster, T. (2000, April). Effects of laptop computers with multimedia and pre–sentation software on student achievement. Annual meeting of the American Education Research Association, New Orleans, Louisiana.
- Simonson, B., Fairbanks, S., Briesch, A., Myers, D., & Sugai, G. (2008). Evidence–based prac–tices in classroom management: Considerations for research to practice. *Education and Treatment of Children*, 31(3), 351–380.
- So, W. M. W., & Kong, S. C. (2007). Approaches of inquiry learning with multimedia resources in primary classrooms. *Journal of Computers in Mathematics and Science Teaching*, 28(4), 329–354.
- Squire, K. (2001). Reframing the cultural space of computer and video games. Massachusetts Institute of Technology. Retrieved March 14, 2006, from <http://cms.mit.edu/games/education/research–vision.html>
- Surowiecki, J. (2004). *The wisdom of crowds: Why the many are smarter than the few and how collective wisdom shapes business, economies, societies, and nations*. New York: Doubleday.
- Tarhan, L., & Acar, B. (2007). Problem–based learning in an eleventh grade chemistry class: “Factors affecting cell potential.” *Research in Science and Technology Education*, 25(3), 351–369.
- Urquhart, V., & McIver, M. (2005). Teaching writing in the content areas. Alexandria, VA: ASCD.
- Vatterott, C. (2009). Rethinking homework: Best practices that support diverse needs. Alexandria, VA: ASCD.
- Vogelstein, F. (2007, September). How Mark Zuckerberg turned Facebook into the world’s hottest platform. *Wired*. Retrieved April 5, 2012, from http://www.wired.com/techbiz/startups/news/2007/09/ff_facebook
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Waxman, H. C., Connell, M. L., & Gray, J. (2002). *A quantitative synthesis of recent research on the effects of teaching and learning with technology on student outcomes*. Naperville, IL: North Central Regional Educational Laboratory.
- White, R. T., & Tisher, R. P. (1986). Research on natural sciences. In M. C. Wittrock (Ed.), *Hand–book of research on teaching* (pp. 874–905). New York: McMillan.
- Wong, H. K., & Wong, R. T. (1998). *How to be an effective teacher: The first days of school*. Moun–tain View, CA: Harry K. Wong Publications, Inc.
- Woolfolk, A. (2004). *Educational psychology*. Boston: Pearson.
- World at Work. (2009). Telework trendlines 2009. Available from <http://www.worldatwork.org/waw/adimLink?id=31115>



نبذة عن المؤلفين

هوارد بيتلر-Howard Pitler: أحد كبار المديرين في مؤسسة وسط القارة لبحوث التربية والتعليم-McREL. يقدم ورشات عمل، ويقدم التدريب للمعلمين والمديرين من المراحل الدراسية جميعها عن الإستراتيجيات والتقنية التعليمية البحثية وأصول التربية؛ فضلاً على إجراء عمليات التدقيق التقني للمناطق التعليمية؛ كذلك يعمل مع الإدارات في المدارس والمناطق التعليمية على توظيف برنامج المراقبة الصفية Power Walkthrough. حاز درجة الدكتوراه في الإدارة التعليمية من جامعة ولاية ويتشيتا، ودرجة الماجستير في الأداء الموسيقي من ولاية ويتشيتا، ودرجة جامعية في التعليم الموسيقي من جامعة إنديانا. زِدَّ على هذا، نال هوارد لقب معلم أبل المميّز، وجائزة سميثسونيان، وجائزة مدير المدرسة المميّز الوطنية. له مقالات في صحف عدّة، وشارك في تأليف الطبعة الثانية من كتاب (التدريس الصفي الناجح)؛ وكتب للتدريس الصفي الناجح؛ وكتاب (توظيف التقنية مع التدريس الصفي الناجح).

إليزابيث روس هبل-Elizabeth Ross Hubbell؛ أحد استشاريي تقنية التعليم في مؤسسة وسط القارة لبحوث التربية والتعليم-McREL. تقدم ورشات العمل والتدريب للمعلمين من مختلف المراحل الدراسية عن الإستراتيجيات التعليمية القائمة على البحوث ودمج التقنية في التعليم. وهي تكتب نماذج لمنهاج الدروس على شبكة الإنترنت، وتجري عمليات تدقيق تقني في المناطق التعليمية، إضافة إلى ذلك، تدرّب إدارات المدارس والمناطق التعليمية على توظيف

برنامج Power Walkthrough. قبل عملها في McREL، كانت مديرة مناهج على مستوى المبنى المدرسي (building-level curriculum director) ومعلمة في المرحلة الابتدائية، وكان عملها هناك يشدّد على الجمع بين بيئات التعليم في القرن الحادي والعشرين وفلسفات مونتسوري. نالت درجة الماجستير في تقنية المعلومات والتعليم من جامعة كولورادو-دنفر ودرجة بكالوريوس في التعليم المبكر/الابتدائي من جامعة جورجيا. وكانت أحد المرشحين الأربعة الذين تأهلوا إلى النهائيات لجائزة (إد تك) الوطنية في التقنية والتعليم لعام 2003. لها مقالات في صحف عدة، وفيها برينسيبال-Principal، ومونتسوري لايف-Montessori Life، والتعلم والتعليم مع التقنية-Learning & Leading with Technology، شاركت في تأليف كتاب (توظيف التقنية مع التدريس الصفّي الناجح) و(مستقبل المدارس: تعليم أمريكا في 2020) و(التعليم الصفّي الناجح في طبعته الثانية). وقد حاضرت إيزابيث في مجموعة من المؤتمرات الوطنية، وفيها هيئة مراقبة المناهج الدراسية-ASCD وتطويرها، وISTE، ومؤتمر NSBA للتقنية والتعليم.

مات كوهن-Matt Kuhn؛ استشاري أول المناهج وتقنية التعليم لدى مؤسسة وسط القارة لبحوث التربية والتعليم-McREL، ومعلم معتمد من شركة جوجل. يجري ورشات التطوير المهني للمعلمين على المستوى الوطني في تقنية التعليم والريادة في التقنية، والرياضيات والعلوم. له مقالات منشورة في مجلات عدة، وفيها مجلة برينسيبال، ومجلة التعليم والقيادة مع التقنية، وهو أيضا مؤلف مشارك في كتاب (ماذا نعرف عن تعليم الرياضيات وتعلّمها؟) الطبعة الثالثة. عمل في المختبر الوطني للتوعية التقنية-national laboratory technology outreach. كان معلماً لمادتي العلوم والرياضيات للصفوف من السادس حتى الثاني عشر. مدير سابق لمدرسة من الروضة حتى الصف الثامن. حائز على شهادة بكالوريوس في هندسة الطائرات، ودرجة ماجستير في تدريس العلوم، ودرجة دكتوراه في إدارة تقنية التعليم من جامعة دنفر.

٥ نبذة عن وسط القارة لبحوث التربوية والتعليم – McREL

مؤسسة غير ربحية، معروفة على المستوى الوطني، متخصصة بالتنمية وبحوث التعليم، مقرها في دنفر، ولاية كولورادو، ولها مكاتب في كل من: هونولولو، وهاواي، وأوماها، ونبراسكا. منذ عام 1966، ساعدت على تحويل ما تضمنته الممارسات الناجحة في التعليم من بحوث وحكم إلى توجيه عملي للمعلمين. وهي تضم مع شركاتها التابعة أكثر من مئة وعشرين موظفاً؛ منهم باحثون يعتدّ بهم، واستشاريون ذوو خبرة، وكتاب معروفون يستخدمون البحوث لتزويد المعلمين بخدمات التوجيه والاستشارة والتطوير المهني في سبيل تحسين نتائج الطلاب.