

ACTION RESEARCH / EVIDENCED-BASED EDUCATION - RESOURCES

Note: *Descriptions have been taken from websites and are not intended to provide a critical review of the materials.*

Articles, Papers, and Presentations

Anderson, Amy. "An Introduction to Teacher Research." Retrieved Sept. 14, 2006, from *LEARN North Carolina: K-12 Teaching and Learning Website*: <http://www.learnnc.org/lp/pages/659>

Description: All that distinguishes teacher research from the everyday work of teaching is that teacher research consists of *intentional and systematic inquiry in order to improve classroom practice* — intentional because the teacher chooses to pursue a particular question; systematic because she follows the steps described below. In teacher research, the teacher chooses a question she wants to know more about (the *research question*), plans how to gather useful information (*data collection*), reflects on what she's learned (*data analysis*), and determines how content or instruction can be modified to better serve student needs (*conclusions* or *outcomes*). Teacher research is simply good teaching that is planned and written down in a formal way.

Bournot-Trites, M, & Belanger, J (2005). "Ethical Dilemmas Facing Action Researchers." *Journal of Educational Thought*. Vol. 39, p. 197-215.

Description: The Tri-Council Policy Statement, which has its roots in the Nuremberg Code, specifies ethical obligations of Canadian researchers. The need for such regulations is evident in a number of studies which have shown complete disregard for the rights of human beings, studies which have continued into the current millennium. Teachers who conduct research in their own classrooms encounter ethical dilemmas in common with external researchers, but they also face unique challenges. Following a summary of 13 ethical issues facing educational researchers in general (e.g., students' ownership of their written work; anonymity vs. acknowledgment of accomplishments), this paper explores problems and issues.

Falkowski, Tara. (2007 last update). "What Role Does Action Research Play?" *Chapter 14 from Social and Cultural Foundations of American Education*. Wikibooks. Retrieved from http://en.wikibooks.org/wiki/Social_and_Cultural_Foundations_of_American_Education/Chapter_14/What_role_does_action_research_play%3F_1.

Description: Teachers constantly test and adapt their teaching methods to ensure the best learning environment for their students because teachers know that not all accepted methods work for all students. After all, most educational research is conducted not in an actual classroom but in a controlled environment, yielding results that only theoretically work in a classroom. Teachers who want to prove what methods work with their current group of students can conduct research in their own classroom, referred to as classroom action research.

Harada, V. H. (2003). "Building Evidence-Based Practice through Action Research." In D. V. Loertscher & B. Woolls (Ed.), *Evidence-based Practice and School Library Media Programs, Treasure Mountain Research Retreat #11, Oct. 22-23, Kansas City, MO (pp. 65-74)*. Salt Lake City, UT: Hi Willow Research & Publishing. Retrieved from <http://www2.hawaii.edu/~vharada/vi-Building%20Evidence-12-03-jav.htm>

Description: This paper describes action research as a means to collecting more rigorous and thoughtful qualitative evidence of actual student performance provides a case study of a school level effort to collect this type of data, discusses the benefits of action research and the implications for moving beyond single teams to total schools embracing this approach to improvement.

Johnson, Beverly (1993). "Teacher-As-Researcher." *ERIC Digest*, Retrieved Sept. 16, 2006, from <http://ericdigests.org/1993/researcher.htm>

Description: The concept of teacher-as-researcher is included in recent literature on educational reform, which encourages teachers to be collaborators in revising curriculum, improving their work environment, professionalizing teaching, and developing policy. Teacher research has its roots in action research.

Mettetal, Gwynn (2002). "Improving Teaching through Classroom Action Research." *Essays on Teaching Excellence: Toward the Best in the Academy*, 14, retrieved Sept. 18, 2006, from <http://academic.udayton.edu/FacDev/Newsletters/EssaysforTeachingExcellence/PODvo14/tevol14n7.html>

Description: Teaching and learning centers provide an array of programs and services to assist the instructor who is struggling or the excellent teacher looking for something new. The pedagogical tools suggested can range from collaborative group work to problem-based learning to on-line instruction (see, for example, Nilson, 1998). The dilemma facing the individual instructor is choosing from a myriad of teaching strategies to use in a particular classroom situation. Factors such as class size, content area, and student demographics play a role. The instructor's own skills and style are also critical factors. Classroom Action

Research (CAR) is systematic inquiry with the goal of informing practice in a particular situation. CAR is a way for instructors to discover what works best in their own classroom situation, thus allowing informed decisions about teaching.

Mettetal, Gwynn. (2001). "The What, Why and How of Classroom Action Research." *The Journal of Scholarship of Teaching and Learning*, vol. 2, no. 1. Indiana University. Retrieved from http://www.iupui.edu/~josotl/VOL_2/NO_1/mettetal_v2_n1.pdf.

Description: "The editors of *JoSoTL* have received many inquiries about classroom action research (CAR). What is it? Why should you consider doing it? How do you do it? How does it differ from traditional research on teaching and learning? This essay is an attempt to answer those questions. I will also discuss why CAR is an excellent expression of the scholarship of teaching and learning, accessible to teachers in all disciplines."

Postholm, May B. (2008). "Teachers Developing Practice: Reflection as Key Activity." *Teaching & Teacher Education*, vol. 24, issue 7, p. 1717-1728. Pergamon Press.

Description: The article is based on a research and development project conducted in a Norwegian lower secondary school. The purpose of the text is to show how a project involving a researcher and a teacher team encourages the teachers to reflect on teaching processes, and, furthermore, to show what the form and content of such reflection processes could be. Theories on reflection are presented as the framework in which illustrations from practice are analyzed. Findings from the project show that when teachers question their own practice, they can transcend their teaching, meaning they can think of and see new things. In connecting theory and practice, the article concludes that teachers are shown in this way how to reflect before action, reflecting on prior experiences by using theory, and how they can reflect in action and on action, connecting theoretical concepts to their teaching practice. In this way theories can serve as a tool in reflection processes.

Rinaldo, Vince (2005, Oct., 01). "Today's Practitioner is Both Qualitative and Quantitative Researcher." *The High School Journal*, 89, Retrieved Sept. 18, 2006, from <http://eric.ed.gov>

Description: Although the use of action research has made its way into various faculties of education as a means of applying theory to practice, there remains a disconnect between the teacher as an educator and the teacher as a researcher. Research must be empirically based; therefore, it has traditionally been seen to reside in the domain of the theorist or expert. Action research however, has by traditionalists been regarded as a misnomer; it is at best a case study which has little if any validity beyond the classroom from which the data was collected.

Unknown. (2007). "Results from a National Study of Mathematics in Career and Technical Education." *Forum Brief*. American Youth Policy Forum.

<http://www.aypf.org/forumbriefs/2007/fb012607.htm>

Description: The National Research Center for Career and Technical Education (NRCCTE) recently completed a group randomized trial (GRT) study designed to test a model for enhancing mathematics instruction in high school CTE courses by emphasizing the mathematic principles already embedded in the CTE curriculum. The project was designed to help CTE students make meaningful relationships between basic mathematical principles and related concepts in their CTE classes. To achieve this, CTE teachers in the experimental group were coached by math teachers on how to enhance and teach the mathematical principles naturally occurring in the CTE curriculum. Students would then be able to manipulate concepts from either class and apply them accordingly.

Books

Anderson, Gary L., et. al. (2007). Studying Your Own School: An Educator's Guide to Practitioner Action Research. Corwin Press.

Description: Since the publication of the first edition of "Studying Your Own School", practitioner action research has become an established professional development practice in schools and teacher education programs. While the fundamentals of practitioner action research have not changed, the challenges of large scale reform have dramatically altered the context of teaching. This extensive revision of the book includes the latest investigative methods and reflects the current educational environment.

Caro-Bruce, Cathy, et al (ed). (2007). Creating Equitable Classrooms Through Action Research. Corwin Press.

Description: Despite the best intentions of reform efforts, educational inequity continues to exist in public schools. This book challenges it head-on and shows educators how they can use action research to both raise student achievement and strengthen instructional leadership. Written for either a first-time action research endeavor or one already in progress, this practical guidebook helps practitioners formulate specific research questions, collect and analyze data, and communicate their findings. Educators will discover: ten action research studies on narrowing the achievement gap, guidelines for implementing an action research project that supports culturally relevant instruction, authentic examples for discussion and reflection.

Hendricks, Cher C. (2008). Improving Schools Through Action Research: A Comprehensive Guide for Educators. Allyn & Bacon.

Description: This brief, user-friendly text provides everything a pre-service or in-service educator needs to know to follow the research cycle and conduct an action research project. It emphasizes the reflective processes used in planning and conducting action research studies, data analysis techniques (quantitative and qualitative), and displaying and explaining results. The text provides specific information needed to complete each step of the action research cycle with chapter activities that help the student/reader conduct projects focused on school improvement. Each activity includes a research paper component that helps students create a research paper as they complete the activities. 2nd Edition.

Holly, Mary L., et. al. (2004). Action Research for Teachers: Traveling the Yellow Brick Road. Prentice Hall.

Description: This book serves as a practical guide to conducting action research in educational settings. The author uses metaphors from the Wizard of Oz throughout to discover all facets of action research. Offering step-by-step guidance through the action research process, complete coverage of theories and plenty of real-life examples, it equips practicing and student teachers with the tools they will need to successfully conduct their own action research. Three theoretical/foundational chapters present four action research studies representing a variety of circumstances, grade levels, age groups, and disciplines.

James, E. Alana, et al. (2008). Participatory Action Research for Educational Leadership: Using Data-Driven Decision Making to Improve Schools. Sage Publications.

Description: The participatory action research (PAR) process discussed in the text represents the next evolutionary stage for action research and practitioner research in education. The authors provide a readable overview of the PAR process similar to professional learning communities in schools. This fresh approach to participatory action research fully integrates process with research methodology. The results of the original PAR study and continued work with educational leaders propose that this “And/Both” approach ultimately produces the effect that school leaders seek and appreciate.

Johnson, Andrew P. (2008). A Short Guide to Action Research. Allyn and Bacon.

Description: This third edition guides the learner through both qualitative and quantitative techniques in educational research methods and then describes all phases of the process, including selecting a topic; collecting, analyzing, and reporting data; reviewing the literature; and presenting the report. Data collection techniques reflecting popular authentic assessments and real-life examples

enliven concepts throughout the text. Step-by-step directions for using action research to complete a Master's Thesis are included.

McNiff, Jean. (2005). Action Research for Teachers: A Practical Guide. David Fulton.

Description: Assuming no prior knowledge of research methods and techniques, this book is the perfect companion for teachers at all levels undergoing professional developments that need to enhance their formal reflection skills. Providing a detailed explanation of what action research is and its importance in terms of whole school development, this book invites the teachers to try out educational research for themselves and adopt an investigative attitude that will help improve and evaluate practice.

Mertler, Craig. (2008). Action Research: Teachers as Researchers in the Classroom. Sage Publications.

Description: The Second Edition of Action Research: Teachers as Researchers in the Classroom introduces practicing teachers to the process of conducting classroom-based action research. Written for the practicing educator, the focus is on conducting applied, classroom research. The book's practicality stems from its attention to research methods and procedures that teachers can use with their everyday instructional practices and classroom activities.

Pring, Richard, and Thomas, Gary, ed. (2004). Evidence-based Practice in Education (Conducting Educational Research). Open University Press, UK.

Description: The movement to evidence-based practice in education is as important as it is controversial, and this book explores the arguments of leading advocates and critics. It contains an explanation of evidence-based practice and a discussion of criticism of evidence-based practice in education. Contains chapters by various authors which are relevant to students, educators, and researchers in education, medicine, social work, and psychology.

Schmuck, Richard A. (2008). Practical Action Research for Change. Corwin Press.

Description: Action research provides a process for educators to individually and collectively study their own situations, try new practices, evaluate those innovations, adjust, and try again. In this revised second edition, Richard Schmuck demonstrates how educators at all levels can use action research to improve their professional practice and change the culture of their schools. This updated workbook covers both the proactive and the responsive models of action research districts, or communities. He shows how educators, by reflecting on their past, present, and future practice; can convert frustrations into solvable

problems.

Additional Websites – Action Research Websites

Action Sequence Worksheet, Pennsylvania Department of Education

http://www.pde.state.pa.us/pas/lib/pas/schoolAction_sequence.doc

Description: Action Sequence Template for Student Achievement / Educational Practice Improvement Target using evidence-based strategies.

Evidence-based Education; Curriculum, Evaluation and Management Centre, Durham University (England)

<http://www.cemcentre.org/RenderPage.asp?LinkID=30310000>

Description: The EBE website contains a number of sections. A [Brief Guide](#) introduces the idea of Evidence-Based Education and argues the case for it. The [Evidence-Based Education Network](#) is a support group for those who want to promote this agenda. The [Research](#) section of the site contains resources for teachers and other researchers for conducting and interpreting experimental research. This includes a primer on [Effect Size](#) and the [Effect Size Calculator](#). Finally, a number of [Events](#) are listed, including the biennial Evidence-Based Policies and Indicator Systems conference, with access to many important papers given at these conferences.

Johns Hopkins University, The Center for Technology in Education

http://www.sitesupport.org/actionresearch/ses2_act3_pag1.shtml

Description: This site explains action research and introduces the process.

National Research Center for Career and Technical Education, University of Minnesota

<http://cehd.umn.edu/NRCCTE/Math-In/TechnicalAsst.html>

Description: The National Research Center for Career and Technical Education is moving the compelling results from the evidence-based research study into classroom practice by making Math-in-CTE technical assistance readily available

at the request of states. The Math-in-CTE research project showed that high school students who participate in a math-enhanced CTE curriculum develop a better understanding of mathematical concepts than do their counterparts who participate in the traditional CTE curriculum. Moreover, they improve their math skills without losing important technical skills. By working with states and regional consortia, the NRCCTE makes available this tested model of integrated mathematics instruction to CTE educators across the country.

Promising Practices Network

<http://www.promisingpractices.net>

Description: The Promising Practices Network (PPN) is dedicated to providing quality evidence-based information about what works to improve the lives of children, youth, and families. The PPN site features summaries of programs and practices that are proven to improve outcomes for children. All of the information on the site has been screened for scientific rigor, relevance, and clarity.

Tutoring Models, Supplemental Education Services, Pennsylvania Department of Education

<http://www.able.state.pa.us/nclb/cwp/view.asp?a=3&q=121817>

Description: Evidence-based reading and math tutorial program resources

U.S. Department of Education

www.ed.gov

Description: ED was created in 1980 by combining offices from several federal agencies. ED's mission is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access. The website includes publications.

What Works Clearinghouse

<http://www.w-w-c.org>

Description: Established in 2002, the What Works Clearinghouse (WWC) is a central and trusted source of scientific evidence for what works in education. An initiative of the U.S. Department of Education's Institute of Education Sciences, the WWC: produces user-friendly practice guides for educators that address

instructional challenges with research-based recommendations for schools and classrooms; assesses the rigor of research evidence on the effectiveness of interventions (programs, products, practices, and policies), giving educators the tools to make informed decisions; develops and implements standards for reviewing and synthesizing education research; and provides a public and easily accessible registry of education evaluation researchers to assist schools, school districts, and program developers with designing and carrying out rigorous evaluations.

OTHER: JOURNALS NOTE

Articles on this topic can also be found in *Techniques*, the magazine published by ACTE. Membership is required for online access. You can find information at:

<http://www.acteonline.org/members/techniques/index.cfm>