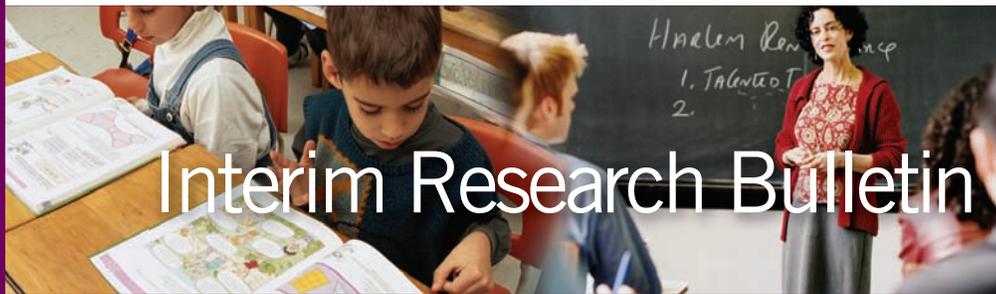




Advancing rigorous educational research in the Southwest



Interim Research Bulletin

Providing you the latest information on exciting education research being conducted in your area

Review of the Evidence on Professional Development and Student Achievement

Practitioners need specific information to guide their selection of Professional Development programs that will result in improved student achievement.

Administrators, Educators and Policymakers have long recognized the importance of professional development and have responded with large investments of time and budget in various professional development programs. REL Southwest is conducting a rigorous research study that encompasses a systematic review of evidence of empirical research on teacher professional development as it relates to student achievement.

[Key] Questions to be addressed in this study include:

What are the characteristics of the existing literature on professional development related to student achievement?

* **What is the quality of the evidence?** – A review of the evidence on what we know about professional development and its impact on student achievement will be examined.

* **How rigorous is the research?** – The review will examine research studies based on their methodological rigor and classify studies according to the quality of their evidence.

How is the research data being collected?

The review will include a search of electronic databases (e.g. ERIC, PsycINFO, Professional Development Collection, etc.). In addition, solicitations will be made to key researchers and examinations of prior literature reviews. This method has been proven effective as a means for establishing the universe of relevant studies in a topic area such as Professional Development outcomes.

[When] will this research be available?

- * **Final Report (May 2007)** – This report will contain in-depth detail regarding the scope of the rigorous research, methodologies, data sources, participants, etc., as well as a comprehensive presentation of research results.
- * **Policy Level Brief (June 2007)** – This brief will provide pertinent information for policymakers as they assimilate data into their decision making process regarding education policy that impact funding for Professional Development.
- * **District Administrator Advisory (August 2007)** – A report customized especially for District Level personnel, the research will be tailored to address needs specific to issues relevant to a District's investment in Professional Development.
- * **Technical Report (August 2007)** – Provides an overview specific to technical characteristics of the research study that are critical to the reliability and validity of the results, such as data sources, methodologies, etc.
- * **School Practical Guide (Fall 2007)** – This guide will be useful to practitioners as it will synthesize the results of the research study and provide guidance on how the results can be readily applied at the school level.

American Institutes for Research (AIR) Engaged for Study

REL Southwest is pleased to announce a partnership with the American Institutes for Research (AIR) www.air.org. As a leading research organization, AIR has repeatedly produced high quality research reports that can be easily understood to allow practitioners and policymakers the capability to incorporate research findings into effective programs and practices.

Dr. Kathy L. Shapley

Senior Researcher, REL Southwest

Dr. Shapley is the team leader for the Fast Response Team at REL Southwest. She collaborates with researcher partners from AIR, WestEd, and The University of Oklahoma and numerous content experts. Currently she is working on several research studies including: the impact of professional development on student achievement, student achievement in the U.S./Mexico border region, and rural education. She is also involved in a randomized control trial focusing on reading strategies for English Language Learners. She has presented at state and national conferences and co-authored book chapters in the areas of research methodology and communication disorders. Dr. Shapley received her M.A. in Research Methods and Ph.D. in Communication Disorders from The University of Nebraska-Lincoln.

Dr. Shapley has been a certified Speech-Language Pathologist since 1994. Her clinical experience provides her with first-hand knowledge of education issues including response to intervention, alternate assessments, and service delivery models for speech and language services. Prior to her employment with REL Southwest, she worked as a research director for a large test publisher developing standardized assessments used in the field of speech-language pathology. She is experienced in both quantitative and qualitative research design and data analysis.

Dr. Kwang Suk Yoon

Principal Research Scientist, American Institutes for Research

In his current position at AIR, Dr. Yoon, directs and conducts research and evaluation studies in a variety of K-12 school reform efforts, with a special focus on NCLB imple-

mentation, teacher quality and professional development, accountability, and student achievement. He serves as project leader, study director, task leader, and senior advisor on a number of multi-year research projects in such areas as education policy analysis, program evaluation, large-scale longitudinal research, research design, instrumentation, and quantitative data analysis. In addition, Dr. Yoon provides intellectual and technical expertise in the design, conceptualization, administration, and analysis of quantitative data collected for various studies and prepares and presents research reports to such wide audiences as policymakers, researchers, and practitioners.

Dr. Yoon also serves as Project Director for the National Science Foundation study, *Longitudinal Design to Measure Effects of Math and Science Partnership (MSP) Professional Development in Improving Quality of Instruction in Mathematics and Science Education*. This four-year longitudinal study examines the effect of teachers' in-service professional development on improving their classroom instructional practice.

Dr. Meredith J. Ludwig

Senior Research Scientist, American Institutes for Research

Since 1979, Dr. Ludwig has been conducting and directing research addressing teacher preparation. As a researcher in the field of teacher education, Dr. Ludwig has studied alternative teacher preparation programs; monitored trends in the content of preparation programs and teacher education outcomes by conducting surveys of deans and colleges of teacher education; and monitored NCATE and TEAC accreditation practices.

Currently at AIR, Dr. Ludwig leads two evaluation studies focusing on both traditional and alternative teacher preparation and certification. She also leads the teacher quality analysis team for the National Longitudinal Study of NCLB teacher quality provisions. During her long involvement with the field of teacher preparation, Dr. Ludwig was an adjunct faculty member at George Washington University in the Department of Teacher Preparation. Dr. Ludwig was the co-chair of a commission established by the Association of Teacher Educators (ATE) to study quality standards for teacher preparation programs.

Dr. James E. Taylor

Research Analyst, American Institutes for Research

Dr. Taylor's current projects at AIR include the National Longitudinal Study of "No Child Left Behind", for which he is responsible for quantitative analyses in the area of accountability and teacher quality, and the National Longitudinal Evaluation of Comprehensive School Reform where he is task leader for quantitative data analyses. Dr. Taylor's expertise and training in quantitative methodology includes hierarchical linear modeling, item response theory, and the analysis of large national datasets.

Dr. Taylor also has extensive experience in evaluation design and the development and revision of survey instruments and measures. This experience includes coordinating the field operations of a multi-state pilot study using mixed methods to examine the correspondence between teachers' and researchers' reports of elementary reading and mathematics instruction. His substantive area of expertise is distributed instructional leadership and coaching. He contributed to the conceptualization of the coaching treatment and led the search for a coach training provider for the AIR/MDRC Professional Development (PD) Impact Reading study.

Dr. Silvia Wen-Yu Lee

Research Analyst, American Institutes for Research

Since joining AIR in 2005, Dr. Lee has been instrumental in leading AIR's project review in mathematics and literature. She has managed a team of six for district website review and phone interview and supervised the collection of information from over 200 districts.

Prior to joining AIR, Dr. Lee served as a Postdoctoral Research Fellow, BioKIDS: Kids' Inquiry of Diverse Species, University of Michigan, Ann Arbor, where she employed a systematic approach to develop middle school test items for assessing science inquiry skills. As a Graduate Research Assistant at the University of Michigan, she developed survey instruments and analytical methods for assessing student learning styles and change in perceived knowledge, skills and confidence.

[?] Did you know ...

that a teacher's perception of effective Professional Development is linked directly to the number of hours spent in Professional Development activities?

A 2000 survey conducted by the U.S. Department of Education, National Center for Education Statistics (NCES) revealed interesting trends in Professional Development and Training in U.S. Public Schools:

Percent of public school teachers who participated in professional development activities during the last 12 months that focused on various content areas, by number of hours spent on the activity: 2000

Content area	Participated in activity	Total hours spent		
		1 to 8	9 to 32	More than 32
State or district curriculum and performance standards	80	57	31	12
Integration of educational technology into the grade or subject taught	74	61	28	11
In-depth study in the subject area of main teaching assignment	72	43	34	23
New methods of teaching (e.g., Cooperative learning)	72	59	29	11
Student performance assessment (e.g., methods of testing, applying results to modify instructions)	62	67	25	8
Addressing the needs of students with disabilities	49	72	19	8
Encouraging parent and students with disabilities	49	72	19	8
Classroom management, including student discipline	45	73	20	7
Addressing the needs of students from diverse cultural backgrounds	41	71	20	9
Addressing the needs of students with limited English proficiency	26	68	20	12

NOTE: Percentages for total hours spent in the activity are based on public school teachers who participated in professional development over the 12 months preceding the survey. Percents are computed across each row, but may not add to 100 because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Professional Development and Training in U.S. Public Schools, 1999-2000," FRSS 74, 2000.

REL Southwest run by Edvance Research, Inc., is one of ten educational laboratories in the Regional Educational Laboratory Network (REL Network), the nation's network of support for research-based school reform run by the Institute of Education Sciences (IES). REL Southwest serves the states of Arkansas, Louisiana, New Mexico, Oklahoma, and Texas and works for the benefit of over 6.5 million students, over 400,000 teachers in approximately 14,000 schools in grades pre-kindergarten through college in this five-state region.