**Project Title:** From Reading to Writing in Social Studies: Genre Study in an Elementary Classroom

**Project Personnel:**
Luciana de Oliveira, Purdue University  
Lesley Miller, Wea Ridge Elementary  
Angela Schoenbeck, Purdue University

**Project Description:** The project created a synergistic, discovery-oriented partnership between Purdue University faculty and Indiana’s P-12 teachers. The study addressed the Holmes partnership goal #1, *high quality professional preparation*, as the results of the project helped us attain knowledge about reading and writing in social studies. It also addressed goal #2, *simultaneous renewal*, as the project personnel engaged in examination of how to teach and focus on different social studies genres with elementary students. The study catered to the growing diversity of our schools since one of the purposes was to identify ways to make social studies more accessible to students, especially English language learners, addressing goal #3, *equity, diversity, and cultural competence*. The project provided *school and university-based faculty development* (goal #5), since it enabled the university faculty member, the clinical instructor, and the teacher to collaborate on a publication based on this project, providing opportunities for *scholarly inquiry and the development of programs of research* (goal #4) based on the role of language in content area learning.

The short term impact was that students used some language features of their studied genre in the writing they produced. The long term goal for students is, through exposure to different genres, they are able to step outside of their comfort zone and attempt more authentic writing, one that resembles social studies genres, and to express content through writing. The focus of the study was not to create a better single piece of writing, but to give the students tools to enable them to become better social studies writers. We plan to use the understanding developed during this project to design in-service workshops for elementary school teachers that focus on text analysis and genre study in the social studies classroom, which we are planning to deliver in the 2008-2009 academic year.

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**Project Title:** Understanding the Role of Language in Science Learning Through the Development of Elementary Science Lessons

**Project Personnel:**
Luciana de Oliveira, Purdue University  
Kathryn Nelson, Happy Hollow Elementary

**Project Description:** This project created a synergistic, discovery-oriented partnership among Purdue University faculty and Indiana’s P-12 teachers. This study addressed the Holmes partnership goal #1, *high quality professional preparation*, as it improved knowledge in science for teachers and students. It also addressed goals #2, *simultaneous renewal*, as the elementary school teacher engaged in examination of her continuing development and identified ways to change and adapt instruction to the student needs. This study catered to the growing diversity of our schools since one of the purposes was to identify ways to make science more accessible to students, addressing goal #3, *equity, diversity, and cultural competence*. The project provided *school and university-based faculty development* (goal #5), as it enabled the university faculty member and the teacher to collaborate on a presentation and publications based on this
project, providing opportunities for **scholarly inquiry and the development of programs of research** (goal #4) based on the role of language in content area learning.

The results of this project demonstrated the importance of developing a critical understanding of language in science learning and teaching. Students experienced language-based lessons and learned strategies to analyze the language in science texts so they were able to understand what is important. The teacher developed a better understanding of science lesson design and implementation using text analysis tools. We will use the understanding developed during this project to design in-service workshops for elementary school teachers that focus on text analysis and design of language-based science lessons.

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**Project Title:** Constructing Multiple Literacies in the English Classroom

**Project Personnel:**
Melanie Shoffner, Purdue University
Martha Long, Jefferson High School

This study investigates the construction and support of multiple literacies through original curricula in the secondary English classroom. Research shows that while conceptions of literacy have expanded beyond print literacy to include visual, media, technological and critical literacies (Anders & Guzzetti, 2005; Beck, 2005; Jetton & Dole, 2004; Leu, Kinzer, Coiro & Camack, 2004), traditional print literacy is most commonly found in classrooms. Conceptions of literacy are also “evolving to mean a complex system of tools that people use to negotiate and construct understandings of themselves and their world” (Anders & Guzzetti, 2005, p. 26). In this representation of literacy, social and cultural understandings are viable outcomes. In keeping with this changing understanding of literacy, English teachers’ conceptions of literacy must evolve beyond a static presentation of literacy as the comprehension of print texts.

In spring 2008, Mrs. Long’s basic-level 9th grade students completed a research project on the Great Depression during a unit on the novel To Kill a Mockingbird. In the past, this project was based in the traditional view of literacy, with students using print texts as resources for a research paper. Working in a multiple literacies framework, a revised version of this project incorporated visual and media literacies (photographs, artwork, music, documentary film), technological literacy (student use of technology for creation) as well as print literacy. In addition, students had the opportunity to consider social and cultural understandings through their study of the text To Kill a Mockingbird. To support a multiple literacies framework, Dr. Shoffner worked directly with Mrs. Long to develop the unit and create materials.

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**Project Title:** Effects of Computer-Assisted and Teacher-Delivered Conceptual Model-based Problem Solving Instruction

**Project Personnel:**
Yan Ping Xin, Purdue University
Janell Uerkwitz, Murdock Elementary
Dake Zhang, Graduate Student, Purdue University

Participants will be 10-20 4th and 5th grade students with or at-risk for mathematics disabilities (MD) currently enrolled in the after-school program at Murdock Elementary School. Pre-
assessment will be conducted to identify students' performance in math problem solving using KeyMath-Revised-Normative Update (KeyMath-R/NU, Connolly, 1998) and the criterion test designed for this study. Stratified (based on pre-assessment results) random assignment will be used to assign students to each of the two comparison conditions (computer-assisted instruction [CAI] vs. teacher-delivered instruction [TDI]). A single-subject design and/or group design (depend on number of students to be recruited) will be employed to compare the effects between the two conditions.

Criterion tests will be developed to assess students’ pre and post intervention performance in solving a range of multiplication and division word problems. Following the baseline or pretest assessment, students will be taught by CAI or TDI to use conceptual model-based diagrams (Xin et al., 2007) to represent and solve problems.

Two school teachers and two pre-service teachers will be recruited and responsible for teaching the two conditions. To control for the teacher effect, one school teacher will teach the CAI condition group and another school teacher will teach the TDI condition. They will switch across the conditions half way through the intervention. Similarly, each of the two pre-service teachers will teach one condition and they will switch half way through the intervention.

1. This project will explore whether CAI would be as effective or more effective as TDI in teaching conceptual model-based problem solving instruction. The CAI instructional model to be developed in this project will serve as a prototype for a more sophisticated computer-assisted instructional program to be developed hopefully through an IES grant project. In today’s inclusive classroom, the classroom teacher is responsible for teaching an increasingly diverse student population in the same classroom. It is important to explore alternative instructional approaches to facilitate differentiated instruction to meet diverse needs of each individual in an inclusive classroom.

2. This project will provide in-service and pre-service teachers with opportunities to learn and implement evidence-based effective instructional strategies (i.e., conceptual model-based problem solving). It facilitates translating research into practice.