

LESS is More: A Comparative Analysis to Determine the Efficacy of Literature-based Elementary Social Studies (LESS) Program on Students' Reading Comprehension

Abstract

The research project examines the impact of the Literature-based Elementary Social Studies (*LESS*) program on the reading achievement of 4th and 5th grade students. The *LESS* program contains 4th and 5th grade standardized packages comprised of 10 children's books with 10 matching lessons. Four 4th and 5th grade teachers in the Cortland City School District will participate in a pilot study to test the effectiveness of the *LESS* program on learning comprehension of 80 students. Two teachers will implement the *LESS* program to students in the experiment cohort. The reading achievements of these students will be compared to a control cohort who will not receive intervention (taught by two other teachers in the same school district) to determine the effects of the *LESS* program on reading achievement. Statistical analysis of reading comprehension scores of the participating students will assess if the *LESS* program improves the reading comprehension scores for students in Grades 4 and 5 who were taught using the *LESS* program. The experimental data will be used as pilot data for a larger study within New York State that will be proposed to the *U.S. Department of Education*, Educational Sciences Division that funds research studies that impact student learning.

(200 words)

“In the event that this proposal results in an award, I hereby authorize the State University of New York College at Cortland to release this abstract for college publicity and/or educational purposes.”

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Section 1. Specific research question

The research question is “To what extent can the use of the Literature-based Elementary Social Studies (*LESS*) program improve reading comprehension for 4th and 5th grade students in the Cortland City School District?”

Section 2. Significance of the project

Since 2001, the Education Act known as No Child Left Behind (NCLB) requires elementary schools to focus their energy, money, and time on improving reading and math scores. Research indicates that increased time spent on mathematics and language arts does not necessarily mean that student achievement will rise in those areas (Baker, Fabrega, Galindo, & Mishhook, 2004). But the trend to emphasize reading and math continues. With the testing mandates, history, civics, geography, and the social studies in general are being virtually wiped out from the elementary school curriculum (Rabb, 2004). If they are not completely out of the picture, they are on the back burners. While the emphasis on teaching reading at the expense of social studies and other content areas in the elementary grades remains an unintended consequence of NCLB, literature suggests that curtailing content area (such as social studies) from the elementary curriculum may have detrimental effects on reading achievement in the upper elementary grades – the very grades where students have the most serious reading achievement challenges (Biancarosa & Snow, 2004; Kamil, 2003).

Section 3. Literature Review

It is not a new claim that reading in subject areas such as social studies improves students’ reading achievement (McKenna & Robinson, 2005). Investigations conducted by the *Center for the Improvement of Early Reading Achievement (CIERA)* suggest that efforts to integrate subject area and reading instruction increased general literacy knowledge and skills as well as subject-matter knowledge even for primary-grade students (Palincsar & Duke, 2004). When readings are selected from topics in geography, history, and other social studies areas, students showed greater interest and increased motivation, as compared to when they read in English language arts (Brophy & Alleman, 2002). Existing research suggests that more investigations must be conducted on literacy intervention programs that mediate classroom practices which are closer to students’ learning (Wixson & Yochum, 2004). An earlier study using the GeoLiteracy program as an intervention program found that the students’ reading comprehension achievement improved (Hinde et al, 2007). The preliminary results reveal that teachers are not only able to effectively integrate geography, reading and writing skills, but that when they do so, students learned more effectively and understand the material better (Hinde et al, 2007).

Studies advocating the teaching of social studies with a literature-based instructional approach have taken many forms. Some articles listed appropriate books for teaching social studies (Johnson, 2007). Some make rationales for literature-based social studies teaching, and others suggest strategies to be used for literature-based social studies instruction (Camicia, 2007). Very few authors present evidence from research concerning the effects of literature-based instruction (Krey, 1998). Thus there is a need to establish such research findings.

Section 4. Rationale

The fascinating knowledge of social studies encourages elementary students to understand and appreciate the world so as to enjoy it and see different factors affecting our planet and its people (Kirman, 2003). Learning social studies can be empowering for elementary students, perhaps for the first time, they learn to have some depth of historical, political, and cultural understanding of the world they live in (Kitchin, 1999). However, social studies curricula usually stop at this point. Surveys conducted in early 1980s and 1990s show that geography, for example, a central social studies subject, was considered the least favorite subject for elementary school students on a list of school subjects (Sack & Petersen, 1998). There appears to be an educational void that does not embrace the full scope of social studies education. The *LESS* Program has a strong potential to fill this void. The Investigator hypothesizes that children reading high-quality, age-appropriate, social studies-oriented children's books will gain academic knowledge, academic and social skills, and civic values to prepare citizens to "make informed decisions in an increasingly interdependent and culturally diverse world (NCSS, 1994)."

Section 5. Research design and methods

The *LESS* Program is comprised of a package of ten children's literature books and their corresponding lesson plans for grades 4 and 5. Each of the lesson plans has been selected by the investigator to enhance student literacy and social studies learning. Each book selected in the *LESS* program matches at least one of the following Ten Thematic Strands of Social Studies (The National Council for the Social Studies): 1) Culture; 2) Time, Continuity, and Change; 3) People, Places, and Environment; 4) Individual Development and Identity; 5) Individuals, Groups, and Institutions; 6) Power, Authority, and Governance; 7) Production, Distribution, and Consumption; 8) Science, Technology, and Society; 9) Global Connections; and 10) Civic Ideals and Practices. (<http://www.socialstudies.org/standards>).

The *LESS* Program will be used as an **intervention program** for 80 students in grades 4 and 5 at a local elementary school. Four teachers will volunteer to participate in the study. Two of them will be randomly assigned to teach their students using the *LESS* program while the other two teachers will use their regular class curriculum without the *LESS* program. A total of 80 students will yield the intervention and control group data analysis for this study, which uses a quasi experimental model since the investigator is not able to control for variables beyond the existing makeup of the classrooms. Participating students can't be randomly assigned to intervention and control cohorts, as in most educational research in classrooms. For this study, the investigator will collect student information (students' gender, age, race, aptitude, etc.) through teacher interviews and report cards of students.

A standardized reading comprehension test will be administered as a pretest to both intervention and control groups to develop a reading comprehension baseline for the *LESS* program. The two intervention teachers will then implement ten lessons in a time period of ten weeks based on ten children's books selected for the *LESS* program. The intervention teachers will also be asked to administer a reading posttest at the completion of the 10 *LESS* lesson plans.

The comparison teachers (from the same school at the same grade level) will administer the same reading pretest and later the same posttest to the control students that have not participated in the *LESS* program lessons. The investigator anticipates a three-month span between the administrations of the reading pretest and posttest.

Participating teachers' years of teaching experience, academic background, philosophy of teaching (e.g. regarding parental engagement, student support structures, and curriculum) may influence reading comprehension levels of their students while implementing the LESS program. One can presuppose that teacher participants in the intervention group may be more likely to use creative literature-based materials to increase student reading comprehension than those who do not volunteer for the study. To address this variable, the investigator will interview each of the teacher participants prior to the implementation of the LESS program to gather information about their teaching strategies, philosophy, years of experience, attitudes toward promoting parent support and other factors that could influence the increase in student reading comprehension at the end of the study. The information gleaned from the four teacher participants may show interesting information about multi variances in instruction ability. Additionally, the intervention teacher participants will be asked at the end of the study to provide the researcher with information on how they actually adjusted the LESS program lessons to their students.

Participant recruitment:

The investigator has described and discussed the *LESS* program concept to the schools, and it has been favorably received. The incentive for teachers to participate includes: a) receipt of an honorarium for participating in this project; b) receipt of 10 new national, award-winning books and corresponding integrated lesson plans; c) opportunity to participate in a research study and professional development workshops; d) opportunity to improve their students reading comprehensive resulting in more engaged and enthusiastic learners; and e) opportunity to present their involvement to peers. Teachers in the control cohort will get the same honorarium, books, and lessons. They will use the *LESS* program in the next semesters after the study is over.

IRB approval: The investigator submitted an IRB application on February 4, 2008. District superintendent's approval is part of the IRB submission, along with consent forms that teachers and parents will need to complete prior to participation. Because the study will require ALL students in the intervention group to participate, parent information sheets will be sent home should parents have any questions. Based on prior research studies from other faculty in the *School of Education*, the investigator will meet with parents and school board members prior to the commencement of the study to assure that parents are aware of the procedures, have opportunities to ask questions, and can be kept apprised of the progress of the study.

Section 6. Evaluation of project outcomes

The students' reading comprehension test will be identified and adapted from New York State standardized reading tests as the pre-test and post-test. Descriptive statistics will be used to compare and analyze the tests. Independent-samples t-tests will be conducted to assess the presence of systematic group-related differences in pretest achievement. Analysis of covariance (ANCOVA) will be conducted for the participating students at the 4th and 5th grades. Reading pretests, posttests, and pre-post differences will be examined for each group of participating students (i.e., students exposed to *LESS* lessons or students receiving regular curriculum instruction).

The timeline: The study will require the investigator to develop the pre and post tests well before the project begins (Please see Appendix). I have submitted the IRB application on February 4, 2008 for this project. The *LESS* program and teacher interviews, along with the pre and post student tests will occur over a 14 week period during the fall 2008 academic year. The spring of 2009 will be used to analyze data and prepare for a presentation to the District, and then considered for other likely venues. The preparation of journal articles will begin as the project is progressing, however,

it is not likely that they will be submitted until after the project is completed, probably summer and fall 2009.

Dissemination and potential for future funding

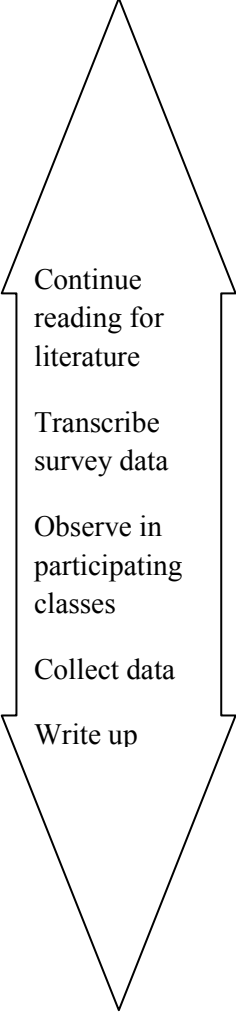
Potential journals that are good venues for publishing such research include the following refereed journals: *the Elementary School Journal*, *the Reading Teacher*, and *Social Studies for the Young Learners*. In addition to the dissemination of these findings in journals, presentations at local and national conferences will be an important avenue for making the findings public. Presentations could be made at the annual conferences of *American Educational Research Association (AERA)*, *College and University Faculty Association (CUFA) of the National Council for the Social Studies (NCSS)*, and *International Reading Association*. The Seven Valley Reading Council's annual literacy forum can also be a place where the researcher could collaborate with participating teachers for joint presentations.

Future research using similar *LESS* programs on other grade levels is important in order to propose for the content-based and subject-integrated reading programs in public schools. The Investigator plans to develop a research agenda based on the preliminary findings from this study that would focus on how to increase students' reading achievements and knowledge of social studies using children's literature. To develop this longitudinal research project, the Investigator plans to apply for future funding from outside funding sources. A good candidate for funding is the *United States Department of Education*, *Institute for Educational Sciences*, and the *Spencer Foundation*.

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Appendix - Research Timeline

Dates	Research Activity	Evaluation
March – May 2008	<ul style="list-style-type: none"> • Research/select books for the LESS program • Collect/develop lesson plans using selected books • Identify interested teachers as experiment groups in the local schools 	 <p style="text-align: center;">Continue reading for literature</p> <p style="text-align: center;">Transcribe survey data</p> <p style="text-align: center;">Observe in participating classes</p> <p style="text-align: center;">Collect data</p> <p style="text-align: center;">Write up</p>
June 2008	<ul style="list-style-type: none"> • Identifying and adapting reading comprehension tests for 4th and 5th grades 	
June-August 2008	<ul style="list-style-type: none"> • Continue to identify interested teachers in local schools and ask them to recommend colleagues as comparison groups 	
August 2008	<ul style="list-style-type: none"> • Distribute survey for all participating teachers • Offer a workshop for teachers in experimental group on how to integrate the LESS program 	
September- November 2008	<ul style="list-style-type: none"> • Administer the pretest reading test for both groups • Experimental groups teach the LESS program • Observe classes both in experimental and comparison groups • Administer the posttest reading test for both groups 	
December 2008	<ul style="list-style-type: none"> • Distribute the post-intervention survey to experiment teachers • Analyze the data (statistics and survey) • Share data with participating teachers and write up 	
Spring 2008	<ul style="list-style-type: none"> • Write up for publication and presentation 	