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ABSTRACT

In the fall of 2001, a local middle school decided to implement a new elective course. This course was designed to assist struggling middle school readers in acquiring the reading proficiency that would be required to succeed in higher level course work. Students remained in their regular English classes, but devoted the elective period that their peers spent playing steel pans or learning perspective drawing to improving their reading skills. The central focus of the class was to teach students the strategies proficient readers use and provide a supportive environment for the practice and development of those strategies. Classroom teachers and the school's administrators recommended the students for this course; test scores and classroom performance were the dominant criterion. This study examined the effect of an elective course in reading strategies on students reading comprehension as measured through the state-sponsored test. Seventeen seventh and eighth grade students participated in the study. For eighth grade participants, reading comprehension test scores given at the end of seventh grade and at the end of eighth grade were analyzed using t-test. For seventh grade participants, reading comprehension test scores given at the end of sixth grade and at the end of seventh grade were analyzed using t-test. Results indicated that, on average, the reading comprehension percentile scores of the student participants improved 14.3 percentile stanines more than the students at the site who did not participate in the Reading Strategies course. Additionally, two students from the initial group were interviewed and asked questions pertaining to their perceptions of the impact of the reading strategies elective course on their current reading practices. Results indicated that student participants remember and apply a number of the strategies learned in their high school classes. Importantly, students report that they "often" approach their academic reading assignments with confidence. An appendix contains student interview questions. (Contains 10 references and 9 tables of data.) (Author/RS)

Title Page

Impact of a Middle School Reading Strategies Elective on Reading Comprehension Test Scores and Reading Confidence

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I have been fortunate to observe the efforts of both a talented teacher and resourceful adolescents as they faced, together, the important task of building reading proficiency. Without question, this study would not have been possible without the openness of both the students who elected to enroll in a reading strategies class and the teacher who both implemented and designed the course; I would like to express to them both my sincere thanks and admiration. Our collective hope is that this account provides a foundation for analyzing the results they achieved. Perhaps this analysis will inform the efforts of others who also endeavor to create a means by which all students can access the opportunities reading proficiency brings.

Additionally, the principal, teachers and support staff at the site were eminently professional. I am grateful to them for their candor and willingness to help me do things the right way. These qualities contributed greatly to both this study and my growth as a researcher.

Just as importantly, this study would not have been possible without the support and direction of my instructors at Dominican University of California. Dr. Madalienne Peters has taught me, through example, a great deal about effective teaching. Her good humor and willingness to both participate in and appreciate the trial and error involved in new and challenging endeavors was omnipresent and will serve as inspiration for my future classroom innovations. Thanks, Dr. Peters, for providing much-needed expert guidance and feedback to this novice researcher while we also negotiated the largely uncharted waters of the on-line learning environment together. As a result, I not only

learned how to apply my critical thinking, reading, and writing skills to the challenges of educational research but also received the added value of gaining e-communication skills that are becoming increasingly important in our society.

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Abstract

In the fall of 2001, a local middle school decided to implement a new elective course. This course was designed to assist struggling middle school readers in acquiring the reading proficiency that would be required to succeed in higher level course work. Students remained in their regular English classes but devoted the elective period that their peers spent playing steel pans or learning perspective drawing to improving their reading skills. The central focus of the class was to teach students the strategies proficient readers use and provide a supportive environment for the practice and development of those strategies. Classroom teachers and the school's administrators recommended the students for this course; test scores and classroom performance were the dominant criterion.

This study examined the effect of an elective course in reading strategies on students reading comprehension as measured through the state-sponsored test. Seventeen seventh and eighth grade students participated in the study. For eighth grade participants, reading comprehension test scores given at the end of seventh grade and at the end of eighth grade were analyzed using t-test. For seventh grade participants, reading comprehension test scores given at the end of sixth grade and at the end of seventh grade were analyzed using t-test. Results indicated that, on average, the reading comprehension percentile scores of the student participants improved 14.3 percentile stanines more than the students at the site who did not participate in the Reading Strategies course.

Additionally, two students from the initial group were interviewed and asked questions pertaining to their perceptions of the impact of the reading strategies elective course on their current reading practices. Results indicated that student participants

remember and apply a number of the strategies learned in their high school classes. Importantly, students report that they "often" approach their academic reading assignments with confidence.

Introduction

Sam is a diligent worker. At an age when many students avoid contact with teachers, Sam is willing to meet with teachers to improve his skills. Being proactive is a skill that has served Sam well as a new student at his middle school both academically and socially. At thirteen, Sam remains a phonetic speller but understands the importance of getting an adult to proofread his work. Additionally, he is consistent in his commitment to using the available technology for word-processing and the editing tools it contains. With his dark, neatly trimmed hair, expressive eyes, and insightful questions about literature read aloud in class, Sam's ability to understand the themes in grade-level texts like *Of Mice and Men* is undeniable. However, in spite of this diligence and engagement, Sam is unable to succeed at any assignment involving independent reading and comprehension of grade level text. His rate of reading is far below that of his peers; consequently, he requires additional time for tests in all of his academic courses.

Sam's dedication to progress is poignantly evident in the frequency with which he volunteers to read aloud. When reading a part in the drama *Twelve Angry Men*, Sam's voice captures the character and emotion of his assigned juror perfectly. However, his pronunciation makes it difficult for his peers to understand his portrayal. As a result, clarification of Sam's reading is frequently necessary. While he remains a willing and active participant, his embarrassment is evident.

Sadly, students like Sam lack the reading proficiency required to succeed in the advanced coursework they will encounter in high school. Without intervention, struggling middle school readers are unlikely to experience success in high school level courses. It follows that these students are also unlikely to gain access to the opportunities

that academic success brings. Promoting both a love of reading and proficient reading skills among students is one of the most important tasks educators perform. Without reading proficiency, students are unable to succeed in advanced level course work. When students have never experienced the pleasures reading can bring, they are unlikely to invest the time and effort required to achieve proficiency.

Defining the Literacy Difficulties of Adolescent Readers

Even in high performing school districts, some adolescent readers reach the eighth grade without having acquired the reading proficiency that will enable them to succeed in high school courses where they will face increasingly challenging reading tasks. If these struggling readers do not develop strategies for understanding the complex content that advanced course work demands, research suggests that they are likely to be caught in a "cycle of failure." (Collins, 1996) It is critical that middle schools address the problems that their struggling adolescent readers face in a timely fashion, before individuals loose educational opportunities. Only by understanding the problems adolescent readers face can school administrators and teachers, as well as educational researchers, policy makers, and politicians develop and implement instruction that effectively moves these adolescent readers toward proficiency so that they can experience academic success and the opportunities for advancement that accompanies success.

For the past several years, educators, politicians and policy makers have waged a battle about how best to teach reading to our nation's children. The number of students in middle and secondary schools who do not read well is of great concern not only to educators but to politicians and policy makers as well. Donahue, Voelkl, Campbell, and Mazzeo (1999) show that while 74 percent of the nation's eighth graders and 77 percent

of twelfth graders perform at or above the *basic* level of reading achievement, only 33 percent of eighth graders and 40 percent of twelfth graders perform at or above the *proficient* level, and a mere 3 percent and 6 percent, respectively, perform at the *advanced* level. These results suggest that few adolescents are gaining the literacy skills that will enable them to successfully engage in higher-level problem solving in today's "information generating" and "information transforming economy. (Greenleaf, Schoenbach, Cziko, & Mueller, 2001, p.83) Additionally, as Guthrie, Schaefer, and Hutchinson (1991) asserted, because "reading habits and literacy achievement make important contributions to an individuals' socioeconomic mobility, access to higher education, and civic participation, educators bear a special responsibility to help all students achieve high levels of literacy." (Cited in Greenleaf et al., 2002)

Fearful that American adolescents are not developing the advanced literacy skills needed in an age where information and communications are becoming increasingly complex, policy makers are looking to educational research to provide evidence on what works. The Bush Administration s No Child Left Behind Act of 2001 uses the phrase scientifically based research more than 100 times. Over the next six years, the government will award $5 billion to states and districts where reading is taught using scientifically based methods. (Traub, 2002) If the International Reading Association is correct in its observation that there has been a pervasive neglect of adolescent reading, one can only hope that some of these funds will be directed to programs that are successful in promoting the advanced levels of literacy adolescent readers will

need to succeed in an increasingly complex communication age. (Greenleaf et al. p.83)

Theoretical Rationale

Vygotosky's (1978) theory of language acquisition provides a rationale for educators to promote the development of academic literacy in the school setting. According to Vygotsky, cognition is not primarily determined by innate factors; instead, thought and language are the products of the social institutions where the child grows up. Learning occurs when the child is in the action of interacting with people in his environment and in cooperation with his peers. Additionally, through the non-intrusive guidance of someone who has mastered the literacy skills the learner can successfully solve problems of language and meaning that he could not solve alone. The functions that a learner can perform with this assistance in referred to as the zone of proximal development; only through social interaction does the learner grow into the intellectual life of those around them.

Similarly, language scholars Moffett and Wagner (cited in Collins, 1996) argue that reading comprehension is not distinct from general comprehension. "The skills required for comprehending texts, like identifying the main idea, recalling details, relating facts, drawing conclusions, and predicting outcomes, are operations that apply to activities in life. It is understandable that these skills have wound up as reading skills because they are demonstrated when a student reads." However, the authors believe that comprehension is merely comprehension. Rosenblatt's reading response theories in literature also suggest that meaning "does not reside in literary texts, waiting to be interpreted objectively by a teacher or other expert, but instead resides in the transaction

between a reader and a text" (cited in Nishihara, 2000) "These and other theories of reading value an approach to instruction that focuses on social interactions between more experienced and less experienced readers as they personally share their responses to real literature and real problems rather that student responses to literal comprehension questions on canned basal reading selections.

Background and Need

Unfortunately, many attempts at intervention often include a return to basic decoding skills, an approach that fails to develop reading proficiency in older students. Additionally, many interventions also remove the student from his or her regular English class. Consequently, students are unable to interact with peers who may serve as positive reading guides. More importantly, these students are deprived of an opportunity to experience texts that address more mature and complex issues than those typically selected to improve a student's reading skills. In these programs, phonics and word-level instruction figure prominently. These approaches to reading intervention occur even though the National Reading Panel in 2000 asserted that there is little evidence that explicit phonics instruction serves students beyond the first and second grades. (cited in Greenleaf & et. Al., 2002)

Instead, stakeholders must begin to examine the best practices in advancing adolescent literacy, develop those practices into cohesive programs, implement those programs in our schools, and analyze the results achieved through multiple measures. Only then can we hope to observe patterns that may suggest what "works" in moving struggling adolescent readers toward reading proficiency.

Purpose Statement

The purpose of this study is to compare the reading comprehension test scores of a select group of students prior to their enrollment in a reading strategies elective in either the fall semester of 2001 or the spring semester of 2202. During seventh grade, these students received the typical language arts instruction at the school site. During eighth grade, these students completed a specialized course in reading strategies in addition to the typical language arts curriculum. This study analyzes the reading comprehension test scores of these students at the end of seventh grade and the end of eighth grade using a t-test. Additionally, this study uses student interviews and a short survey to ask questions pertaining to the perceptions these students have of the effect of the reading strategies elective course on their current reading practices.

Research Question

The research complied addresses two important and distinct questions. Analysis of the Normal Curve Equivalent (NCE) and percentile stanines (PR-S) of the Stanford Achievement Test Series, Ninth Edition reading comprehension test scores of the target group both before and after their participation in the elective reading strategies course, will focus on the research question: Is there a difference in the target group's reading test scores between the end of seventh and the end of eighth grade with the addition of the elective course? Secondly, the research will offer insight into a question addressing the perceptions of student participants: Do members of the target group report that the strategies learned in this elective course have had an effect on their current reading practices?

Review of the Literature

Adolescent Literacy

A review of the literature documents some of the problems struggling adolescent readers face and seeks to identify the causes of these problems. Additionally, the literature suggests strategies that may be effective in addressing these problems but offers limited information with regard to the measurable successes of these teaching strategies.

Defining the Problem and Examining Interventions

Seeking to both define and respond to the voices of young people in urban schools with whom they have worked, as well as the rising concern among educators, Greenleaf et al. (2002) describe an instruction framework addressing the difficulties struggling adolescent readers face. In this article, the authors provide an overview of a program addressing the literacy needs of young people who face more challenging and complex reading tasks as they advance through school. Interviews, observations, and reading assessments of ninth grade students as they experience an Academic Literacy course at their public, "multiethnic, multilingual, multicultural" high school in San Francisco provide a picture of this instructional program in practice.

According to the authors, the national press, policy makers, educators and concerned families have been engaged in "vitriolic ideological battle" for the past several years about how to best teach reading to our nation's children. (p. 82) Even though there is "broad and substantial agreement among literacy researchers that the instruction of young children's instruction in reading should focus on integrating phonics and vocabulary instruction into meaningful and relevant reading activities, the authors point out that federal and state legislation, as well as funding, have focused on systematic phonics instruction for primary grade students. However, the transition from "learning to read to reading to learn" is also an area that needs attention. Citing the National Assessment of Education Progress' 1998 Reading Report Card for the Nation and the States, the authors show that few adolescent readers are gaining the literacy knowledge, skills and dispositions that will enable them to successfully address the literacy and problem-solving challenges that they will encounter in both advanced coursework and an

increasingly information based economy. Because reading habits and literacy skills are important tools in social and economic advancement the authors contend that educators bear a special responsibility for helping all their students achieve high levels of literacy,

The authors note that once students reach middle school and high school, it is "no one's job to 'teach' reading. However, due to increased public attention on the importance of literacy achievement, struggling readers are being identified and recommended for "remedial, skill-focused interventions." (p. 85) According to the authors, these struggling adolescent readers do not need phonics and decoding instructions. Instead, the authors assert that these readers do need "opportunity and instructional support to read many and various kinds of materials in order to build their experience, fluency and range as readers." Additionally, these readers do need help and support in choosing and reading books that will enable them to develop into "independent lifelong readers." (p. 86)

In 1995, Greenleaf and Schoenbach began work to address the "literacy ceiling" that they contend limits the "academic and performance opportunities of secondary school students" (p.86). As part of their research the authors videotaped interviews with thirty ninth grade students as they read both self-chosen and assigned texts. These case studies and their own research and reading on reading theory and practice result in the instructional framework at work in the Literacy Apprenticeships.

Understanding that research suggests that reading is essentially a social and communicative practice, the authors assert that proficient reading depends upon an individual's ability to use the "socially developed and culturally embedded" conventions of language to "navigate layers of meaning" (p.87). These conventions become more

subject-matter specific and complex as an individual encounters more advanced coursework in the academic disciplines. Moreover, an increasingly diverse student population in the United States means that individual students bring many different social and cultural experiences to their reading tasks.

In the reading apprenticeships the authors construct, an expert practitioner both **tells** and **shows** emerging readers how to build "bridges from their cultural knowledge and language experiences to the language and literacy practices valued and measured in school and society." (p.88) The authors also contend that different academic subjects require different literacy practices; therefore, subject area teachers are often the best at teaching how to read high-level texts in their respective disciplines. Both "**how** and **why** we read in the ways we do becomes part of the curriculum, along with **what** we read in subject-matter classes. (p.89) In order to accomplish this for adolescent readers teachers must organize and integrate the "social, cognitive, personal and knowledge-building" dimensions of classroom life. The social dimension is addressed as teachers and students create a safe environment that builds both an interest in books and a safe environment for sharing questions and areas of confusions surrounding the reading of books. Addressing the personal dimension includes building and expanding students' identities as readers and their own reasons for reading and goals for reading growth. It is essential that students develop reading preferences and connect personal experiences to the texts that are relevant and matter to them. Mental reading processes like questioning, paraphrasing, summarizing and identifying the main idea develop the cognitive dimension. Knowledge-building is addressed by acquiring useful information about the topics imbedded in the text, learning new vocabulary, and an awareness of genre. Effectively

utilizing these four dimensions will allow teachers and students to engage in "metacognitive conversations" that will "demystify the invisible ways we read and make sense of text." (p.92)

Greenleaf and Schoenbach developed a course designed to provide students the opportunity to experience Reading Apprenticeship and implemented it at Thurgood Marshall Academic High School in San Francisco during the1996-1997 school year. This high school is located in one of San Francisco's poorest neighborhoods. "30 percent of the students were African Americans, 25 percent Latino, 24 percent Chinese Americans, 7 percent Filipino Americans, 8 percent other non-White students, and 3 percent White students. Approximately 7 percent of the ninth-grade students qualified for special education services, and 14 percent were identified as English language learners." (p.92)

Because Marshall's faculty was increasingly concerned about the low reading preparedness of the students, all ninth graders were enrolled in twelve sections of an Academic Literacy course that met for two 90-minute block periods and one 50-minute period per week. The authors designed three units that focused on the "role and use of reading in one's personal, public, and academic worlds: *Reading Self and Society, Reading Media, and Reading History*. The course had three goals: to increase students' engagement, fluency and competency in reading." (p.93) Reading *Self and Society* was designed to guide student inquiry into reflecting on both their own reading experiences and those of others. Narratives from authors such as Malcolm X, Frederick Douglas, and Emily Dickinson were read as part of this first unit. *Reading Media* used commercial and visual texts to explore how different audiences are targeted and how literary devices

like symbolism and persuasion are used in visual media. Students created commercials and developed storyboarding skills among other activities. The third unit, *Reading History*, focused on helping students put their own experiences in a historical context. Through documentary film and historical texts, students learned the history of inter-group hostility and violence that culminated with an investigative project centered on the Holocaust.

The impact of this course was evaluated using standardized test scores and qualitative data. Additionally, eight representative students were interviewed. The interview with "Rosa" illustrates the failure of history texts to touch students and also shows that little real reading occurs when students are asked to answer the questions at the end of a textbook lesson. Resourceful students like Rosa simply "hunt" for the chunk of text that provides the answers rather than reading the lesson. "Rosa" finds a contrast to this experience in the Academic Literacy and begins to connect historic events to her personal life and responsibilities. She demonstrates increased awareness of her reading strategies and uses predictive and clarifying strategies with difficult text. In the reading interview, the researchers see that she has created with the interviewer Vygotsky's zone of proximal development. Perhaps involuntarily, Rosa has created a ''thinking aloud, metacognitive conversation" that enables her to monitor and talk about her own reading comprehension. (p.109)

The authors also provide data to show that students who completed the Academic Literacy program significantly improved their performance on the Degree of Reading Power (DRP) test, moving from an on average level of late seventh grade, to a late ninth grade level. This test is both norm and criterion referenced. This accelerated rate of

reading progress bode well for their chances of succeeding with the more advanced reading tasks they will encounter.

Pre and post-test reading surveys provide additional evidence of the Academic Literacy course's positive impact. Students reported increased confidence and more positive attitudes toward reading. Not only were they reading almost twice the number of books as they did on the pretest, but "by June a full 94 percent of the Academic Literacy students said they liked reading." (p.113)

According to the authors, this study provides a rationale for investing in professional development focused on addressing the implementation of the Academic Literacy instructional framework. Instructional implications include moving history instruction from an exercise in reading and retaining facts to a more purposeful, strategic, and inquiry. The authors also use their findings to challenge the curriculum coverage constraints that the standards movement imposes. The authors conclude their study by suggesting that many courses in remedial reading for adolescents are not effective. Instead they suggest that the democratic vision of education requires that educators and society do all that is possible to apprentice adolescent readers to academic literacy, thereby helping them "through and beyond the 'literacy ceiling.'" (p. 117)

Strategies Designed to Promote Adolescent Literacy

Goldenberg's (2000) commentary, focuses on the "awful reputation" in educational research, particularly as it relates to reading research. "Former Assistant Secretary of the US Department of Education Christopher Cross called it Cross's Corollary: 'For every study in education research there are an equal or greater number of opposing studies. "Noting that researchers "themselves seem to take pleasure in

needlessly undermining one another," (p.640) Goldenberg expresses worry that when the research seems to "cancel itself out, policy makers and the public will instead rely on some version of common sense, personal experience, and prejudice." Goldenberg suggests that more emphasis be placed on the following areas of considerable agreement: "the importance of phonological awareness, learning the systematic relationships between letters and sounds, and meaningful and authentic literacy experiences" (p.641).

Discussing the cycle of failure remedial readers have experienced by the time they reach adolescence, Collins (1996) offers suggestions for instruction that breaks this cycle. Her research supports the efficacy of instruction that includes the following: abundant opportunities for revaluation, text selections that are relevant to adolescents, and activities and interactions with both peers and the instructor that build reading confidence. Films, television, small group discussions and newspaper articles are just a few of the tools that can be used to accomplish this goal.

Citing evidence from the Motion Picture Association showing that adolescents aged 12 to 15 made up 11% of the nearly $7.5 billion motion picture market in 1999, Kwon (2002) *asserts* that it is difficult to ignore the influence of movies on teenagers. Today's students are often able to access film adaptations of assigned literature. The author's suggestion is that educators use these film adaptations as "learning tools" rather than allowing them to become the modern day Cliff Notes.

Developing critical thinking skills and promoting recreational reading should be the primary goals of incorporating film into English class. Citing According to Rodriguez and Kies (1998), the three principles of critical thought are identified as "objectivity, analyzing and evaluating actions and policies, and noting similarities and

differences" (cited in Kwon). Through active learning that stresses the development of critical reading skills, students develop critical thinking skills. Instruction that requires students to "summarize, compare, contrast, and critique" a movie and novel pairing of his or her own selection is one activity that promotes the development of these skills through the incorporation of film. Greenwood (1989), an English teacher in Pennsylvania who created this instructional plan, found that his students preferred the books to the film adaptations by a margin of 4 to 1. Another teacher, Barlow (1997), incorporates films that reflect the major themes of the assigned novel, For example, he pairs a modern film, *In the Heart of the Night*, with the reading of Twain's *The Adventures of Huckleberry Finn* to provide a basis for a tangible lesson on prejudice.

Noting that the benefits of recreational reading for middle school students are "boundless," Kwon includes evidence that teachers who enthusiastically read aloud to these students assist struggling readers in rediscovering the joy of narrative text. Modeling reading shows students both the importance and joy of reading. Additionally, the author asserts that reading materials that reflect the emotions teenagers are going through is most effective in promoting recreational reading among teenagers. Reading aloud and also allowing students to view modern film versions of Shakespearean dramas like *Hamlet* and *Romeo and Juliet* can provide a "motivational hook" for students and also provide them with an opportunity to hear the important vocal intonations and see the stage action that brings drama to life. Introducing students to screenplay writing is another way film adaptations can be used as a tool to enrich English instruction.

Kwon concludes by noting two possible negative aspects of the aforementioned instructional plans that incorporate film. Perhaps screenplay

writing is too complicated a task for most middle school students, and English class might easily become film class if teachers are not judicious in their selections and time management. However, because of the intrinsic motivational pull film has on students the author argues for its use in the classroom to promote critical thinking and reading.

Summary of Major Themes

Apparently, there is some common ground with regard to what constitutes good reading instruction for middle school students. Much of the best practices seems to focus on increasing motivation by identifying texts or designing bridges to make texts relevant to students. Technology may have a role in motivating students and making texts more accessible to adolescent readers. Modeling reading aloud is another strategy that has a place in a reading strategies class. Providing protected reading time and small group discussions are also important strategies. Additionally, it is important for teachers to make their invisible reading strategies for different types of texts visible to students. Teachers should share their thought processes as they read academic texts with students.

The literature also suggests that reading proficiency is an important issue in today's society. Basic reading skills will only allow a student to advance so far. To succeed in higher-level course work, students must become proficient readers. Recent statistics suggest that a majority of America's students are acquiring basic reading skills but few are achieving proficiency.

How Present Study Extends Literature

The results of this study contribute to recent literature addressing the best practices in promoting adolescent literacy. By examining the impact of an elective course specifically designed to reflect recent research focusing on effective reading strategies for struggling adolescent readers, this study enlarges the body of literature addressing the efficacy of these strategies. Along with the quantitative data, student interviews contribute new voices to the body of literature addressing the impact this type of instruction has on middle school students – from the student's point of view. Taken together, this study expands and enriches the body of literature policy makers, researchers, administrators, teachers, and parents can consult when making decisions about how to best meet the literacy needs of adolescent readers.

Methods or Procedures

This is a mixed methods study using both qualitative and quantitative data. Administrative and teacher interviews provide the basis for a narrative account of the curriculum designed and implemented as a reading strategies elective course at the middle school site. These interviews also provide the data addressing the identification and selection of student participants. The goal of these interviews is to paint a complete picture of the reading strategies elective course under study.

Student interviews provide qualitative data on the continuing impact of the reading strategies course on academic reading practices and confidence. These interviews were conducted by telephone with two course participants who are currently in the final quarter of freshman year. In these interviews, students reflect on the reading strategies course they completed nine months ago and

answer questions addressing the frequency with which they apply its lessons to their current academic reading practices.

Quantitative data includes a comparison between the pre and post course reading comprehension test scores of seventh and eighth grade participants as measured through the Stanford Achievement Test Series, Ninth Edition. This data was gathered from records at the middle school site, coded to protect confidentiality, and presented in the tables included in this study.

In analyzing data, participants were assigned to one of the following four groups: eighth grade fall 2001 participants, eighth grade spring 2002 participants, seventh grade fall 2001 participants, and eighth grade spring 2002 participants. Test scores were analyzed using Normal Curve Equivalents to assess individual growth over time and Percentile Stanines to compare the scores of the target groups to those of the equivalent grade level taken as a whole.

Ethical Standards

This study adheres to Ethical Standards in Human Subjects Research of the American Psychological Association (Publication Manual of the American Psychological Association, 2002). Additionally, the project was reviewed and approved by the Dominican University of California Institutional Review Board for the Protection of Human Subjects.

Findings

The Site and Its Students

Located in a northern suburb of San Francisco, the middle school under study is one of three schools within one 112-year-old district. The site principal, notes that our 389 students come from a community of both professionals and artisans and reside in neighborhoods that range from affluent and upper middle class dwellings to low income housing, where parents value education and share common expectations for achievement. Well-educated, socially aware, and politically active, parents expect our school to provide a rich and challenging environment for their children. 91% of the student population is Caucasian, 4% Asian American, 2% African American and 3% Hispanic. 99% of the students are primary English speakers; nevertheless, there are over fifteen languages spoken at the site. Although only 12% of community members have school-aged children, 74% of voters approved a $38 million bond for the district s schools last November. This not only reflects the public s commitment to the education of its children, but also the high level of confidence community members place in the job the schools are doing.

Students at this middle school receive instruction from credentialed teachers with expertise and training in their respective subject areas. The principal takes obvious pride in detailing the school s program. In addition to a double period of language arts instruction, all students receive instruction in Math, Science, Social Studies and PE, as well as elective classes that include Art, Steel Pans, Instrumental Band, Spanish, Library/Media Class, Film, Performing Arts, Yearbook, and Study Skills. To meet the individual needs of our students, there are also many programs with support personnel in place,

including the Resource Specialist, Gifted and Talented Education teacher, Reading Strategies teacher, Full Inclusion Specialist, Technology teacher, Speech Specialist, Psychologist, Counselor, Library Media Specialist, Library Media Aide, Resource Specialist Aide, and a full-time Yard Duty Supervisor/Classroom Aide. Our modified block schedule (2 days/week) allows students the time to do hands-on science labs, stretch, run and complete a variety of PE activities, and project based learning in all subjects. Administrators, staff, and parents are confident that this program meets the varied needs of young adolescents and point to test scores as one measure of the program s success.

Students at the site consistently score high on standardized tests, and the school enjoys an overall Academic Performance Index of 897. This score compares favorably to like socioeconomic districts in California. Over 50 % of the students achieve above the 75th percentile in all academic areas.

The Reading Strategies Elective

The 7% of students who score below the fiftieth percentile in reading comprehension are recommended for an extra period of reading instruction daily in the Reading Strategies elective. Additionally, prior to the beginning of each semester, teachers provide the principal with a list of students who are struggling with their academic reading. Classroom teachers are in a unique position to observe reading competency, and these observations form the basis of their recommendations. Administrators contact the parents of identified students, discussing the need for additional reading instruction and describing the content

of the reading strategies elective. Parents are informed that their children will remain in their regular language arts course, and that the reading instruction will occur during the elective period. For the semester at issue, participants will not be able to enroll in Art, Film, Spanish, Yearbook, Steel Pans, or any other elective offering. Parents are encouraged to discuss this elective option with their student.

Believing that student buy-in is an important component in academic progress, the principal also meets with each identified student. These conversations focus on the critical role proficient reading plays in academic success. The principal encourages students to take advantage of this opportunity, emphasizing that they will encounter more rigorous academic reading as they move on to more advanced coursework. Remaining sensitive to the loss of the more fun elective, she urges them to participate in the course.

Students often are pleased to discover that Ms. Schaeffer, who also teachers sixth grade language arts, will be their instructor. For some, this will be a second opportunity to be in her class. For all, Ms. Schaeffer is a well-known and respected part of the school community.

Ms. Schaeffer has consulted Nancy Atwell s writings extensively, using them to both guide her curriculum selections and to inform her own teaching practices. She was thrilled to attend the National Reading Conference in San Francisco last year and incorporated what she learned and bought there into the course. She prides herself on creating a curriculum that reflects best practices as supported through recent research.

During the first week of the course, Ms. Schaeffer administers the Gates-MacGinitie Diagnostic test to identify areas of weakness. This enables her to adjust the curriculum so that it best meets the needs of the students enrolled each semester. She will administer this test again at the end of the semester, using the results to assess the effectiveness of the course and to reflect on her own practices.

The Reading Strategies elective meets four days a week-48 minutes on Monday, Tuesday, and Friday; and 90 minutes on Wednesday. Each day, students receive extended time for independent reading at an appropriate level. During the first few weeks of the semester, Ms. Schaeffer makes it a priority to learn about each of her students. Becoming aware of each student s individual interests enables Ms. Schaeffer to make reading recommendations that are not only appropriate for the reading level of each student but also carry a personal tone. In providing recommendations for students, she has found that a commercial catalog titled *Chinaberry* useful because it has an excellent selection of recommendations for reluctant readers. The student s language arts teacher and library media specialist are also consulted for input regarding these recommendations. As the semester progresses, reading endorsements from peers will provide another important component in the selection of independent reading.

Reflective journal entries are an important element of the independent reading program. Each Wednesday, students are asked to not only record the number of pages that they read in their self-selected book but are also asked to

reflect on their reading and create a journal entry. These journal entries enable Ms. Schaeffer to check-in on the progress of each student. She emphasizes that the student s personal reaction to the reading is the biggest part of the journal entry activity. In addition to providing a short summary of their reading students are encouraged to establish a personal connection to the text through prompts like the following: I predict that If I had been (character) , I would have. Ms. Flynn s assessment of this activity reflects the value she places on the reflective, personal response: check (mainly plot summary), check+ (plot summary includes personal insight and active analysis of reading), check — (student has read little and plot summary is disorganized, carelessly written or inaccurate). Engagement and buy-in is evident as students try to discover who earned a check + for the week. Ms. Schaeffer also uses these journals as a time for additional dialogue with each individual student.

The *SRA Reading Laboratory* is an important element of the Reading Strategies curriculum. At the beginning of each semester, students take the SRA diagnostic quiz and are assigned a color based on the results. Every Monday, each student goes to the SRA box and selects either a story or non-fiction article in the section that corresponds to his color. After reading the selection, the student completes a quiz that includes vocabulary and comprehension. Students score these quizzes themselves, and each individual graphs his results, creating a visual image of growth over time. If they score in the 90th percentile three times in a row, they move on to the next color. Ms. Schaeffer observes,

students like seeing tangible results, and a healthy spirit of cooperative competition develops as students work to achieve higher levels.

Be a Better Reader was designed by the founder of the National Reading Association and is also a key component of the Reading Strategies elective. Ms. Schaeffer articulates the concern of many educators at the site when she states that, most of our students are proficient story-readers but not comfortable with reading history and science textbooks. *Be a Better Reader* teaches students specific reading skills through the use of non-fiction text. The longer block on Wednesday provides ample time to complete one of these lessons each Wednesday.

Students frequently enjoy stories read aloud by Ms. Schaeffer. Some of her recent selections include *The Outsiders* by SE Hinton, *The Trouble with Lemons* by Daniel Hayes, *Mississippi Trial- 1955*,an historical fiction novel about the life of Emmett Till, and *Swallowing Stones* ,a historical fiction novel about Italian boys who were taken by the Nazis and forced to work building trenches. She finds that novels with adventure and mystery work best for reading aloud with students in this age group. Much of the Reading Strategies curriculum reflects research suggesting that a less experienced reader progresses when she interacts with an expert practitioner who is willing to make her own invisible reading practices visible and, thereby, accessible to the student. Listening to Ms. Schaeffer s voice provides a model of inflection, intonation, pacing, pronunciation, and emphasis. Just as importantly, Ms. Schaeffer models her reading strategies for students as she reads. Connecting her own experiences to

those in the narrative, Ms. Schaeffer invites students to do the same. Pausing after important passages, Ms. Schaeffer encourages students to summarize the latest developments in the text.

Reading aloud is also a useful tool to teach the skills required for the advanced expository reading students will encounter in high school. Previewing a textbook chapter aloud, Ms. Schaeffer asks students to predict the content of the chapter and share what they may already know about this topic, or a topic of a similar nature. The non-fiction read-alouds reinforce the mini-lessons that she presents on Tuesdays. These mini-lessons are taken from the *Be a Better Reader* workbook and often emphasize phonics review, vocabulary decoding strategies, and skimming strategies. A short mini-lesson each day focused on a specific skill followed by abundant time for independent reading. Class each day is concluded with a read-aloud; and students often do the reading, assuming Ms. Schaeffer s role as reading guide for the rest of the class.

Sensitive to the fact that students are taking this course as an elective, Ms. Schaeffer has developed a number of activities that feel like pure fun for her students. Every other Friday, *Scholastic Action* magazine provides the fun. Published bimonthly, each issue contains a play. When these magazines are brought in Ms. Schaeffer loves to see their enthusiasm. They re like second graders when they get them, and are so excited to get the best parts. Students read these plays aloud, practicing the expression and confidence that are essential when reading for an audience.

On the other Fridays, students spend part of the period reading comic books, magazines, or any other reading material in the library. *The Guinness Book of World Records* is one of the perennial favorites. Students are allowed to read on the couch in library or next to each other and are encouraged to share reactions and humor. At the end of this period, students read short passages that they really enjoyed to the rest of the class. Concluding the week with community-building activities that provide students with an opportunity to have fun with reading provides a perfect forum for Ms. Schaeffer to encourage them to do some additional recreational reading over the weekend.

Data -Test Results

Results of the reading comprehension section of Stanford Achievement Test Series, Ninth Edition for students who participated in the Reading Strategies elective course during either the fall semester of 2001 or the spring semester of 2002 are presented in the tables that follow. Participants were divided into four groups: eighth grade students enrolled in the course during the fall of 2001, eighth grade students enrolled in the course during the spring of 2002, seventh grade students enrolled in the course during the fall of 2001, and seventh grade students.

Two administrations of the test were used to produce the data: April 30, 2001 and April 29, 2002. The 2001 administration provides the pre-course data and the 2002 administration provides the post-course data.

The scores of these target groups are averaged using the NCE to reflect the change of both the individual participants' scores and the change in the average score of

the group over time. National Percentiles are used to compare the change in the average score of a participant in the Reading Strategies course with the average score of his or grade level as a whole.

Table 1

Fall Semester 2001-Eighth Grade Students

Student	Total Reading NCE (4/30/01)	Word/Vocab	Sent/Comp	Total Reading-NCE (4/29/02)	Word/Vocab	Sent/Comp
001	33.7	54.3	25.3	55.3	53.2	55.3
002	40.7	35.1	44.7	40.7	43.6	40.2
003	50.0	57.5	46.3	61.0	55.9	62.9
004	46.3	38.3	52.1	58.1	49.5	62.9
005	53.7	40.7	62.3	51.6	33.	64.9
Average	44.88			53.34		

Table 2

Student	Total Reading NCE (4/30/01)	Total Reading PR-S (4/30/01)	Total Reading-NCE (4/29/02)	Total Reading PR-S (4/29/02)
001	33.7	22-3	55.3	60-6
002	40.7	33-4	40.7	33-4
003	50.0	50-5	61.0	70-6
004	46.3	43-5	58.1	65-6
005	53.7	57-5	51.6	53-5
Average	44.9	41.4	53.3	56.8

The target group of eighth grade students enrolled in the fall semester reading strategies elective improved its reading comprehension scores by 8.46 NCEs. The national percentile scores for the target group increased by 15.4 percentage points. During this same period of time, the national percentile score for the eighth grade class as a whole decreased by 4 percentage points.

Table 3
Spring Semester 2002-Eighth Grade Students

Student	Total Reading NCE (4/30/01)	Total Reading PR-S (4/30/01)	Total Reading NCE (4/29/02)	Total Reading PR-S (4/29/02)
006	72.8	86-7	62.3	72-6
007	36.5	26-4	30.7	18-3
008	27.2	14-3	58.1	65-6
Average	45.5	42.5	50.3	52.2

Student	Total Reading NCE (4/30/01)	Word/Vocab	Sent/Comp	Total Reading NCE (4/29/02)	Word/Vocab	Sent/Comp
006	72.8	99	62.3	62.3	62.9	59.8
007	36.5	38.3	37.1	30.7	29.9	32.3
008	27.2	13.1	35.8	58.1	43.6	68.5
Average	45.5			50.3		

Table 4

The target group of eighth grade students enrolled in the spring semester reading strategies elective improved its reading comprehension scores by 5 NCEs. The national percentile score for the target group increased by 9.7 percentage points. During this same period of time, the national percentile score for the eighth grade class as a whole decreased by 4 percentage points.

Fall Semester 2001-Seventh Grade Students
Table 5

Student	Total Reading NCE (4/30/01)	Word/Vocab	Sent/Comp	Total Reading-NCE (4/29/02)	Word/Vocab	Sent/Comp
009	47.4	53.2	44.7	50.0	54.3	48.4
010	50.5	63.5	44.7	70.1	65.6	67.7
011	33.7	35.1	35.1	59.8	35.1	82.7
012	35.8	32.3	39.0	45.2	46.3	44.7
013	52.6	56.4	51.1	78.2	77.0	73.7
014	53.7	53.2	54.8	53.7	54.3	53.7
Average	45.6			59.5		

Table 6

Student	Total Reading NCE (4/30/01)	Total Reading PR-S (4/30/01)	Total Reading NCE (4/29/02)	Total Reading PR-S (4/29/02)
009	47.4	45-5	50.0	50-5
010	50.5	51-5	70.1	83-7
011	33.7	22-3	59.8	68-6
012	35.8	25-4	45.2	41-5
013	52.6	55-5	78.2	91-8
014	53.7	57-5	53.7	57-5
Average	45.6	42.9	59.5	65.6

The target group of seventh grade students enrolled in the fall semester reading strategies elective improved its reading comprehension scores by 13.9 NCEs. The national percentile score for the target group increased by 22.7 percentage points. During this same period of time, the national percentile score for the seventh grade class as a whole increased by 4 percentage points.

Spring Semester 2001-Seventh Grade Students

Table 7

Student	Total Reading NCE (4/30/01)	Word/Vocab	Sent/Comp	Total Reading-NCE (4/29/02)	Word/Vocab	Sent/Comp
015	40.7	38.3	42.5	37.1	31.5	41.9
016	33.7	29.1	38.3	53.2	55.3	52.1
017	66.3	70.1	62.3	66.3	61.7	67.7
Average	46.9			52.2		

Table 8

Student	Total Reading NCE (4/30/01)	Total Reading PR-S (4/30/01)	Total Reading-NCE (4/29/02)	Total Reading PR-S (4/29/02)
015	40.7	33-4	37.1	27-4
016	33.7	22-3	53.2	56-5
017	66.3	78-7	66.3	78-7
Average	46.9	44.8	52.2	54.2

The target group of seventh grade students enrolled in the spring semester reading strategies elective improved its reading comprehension scores by 5.3 NCEs. The national percentile score for the target group increased by 9.4 percentage points. During this same period of time, the national percentile score for the seventh grade class as a whole increased by 4 percentage points.

Data-Student Interviews

Two students were also interviewed as part of this study. Selection of these students was designed with one purpose in mind: to include the student who showed the greatest positive change in pre and post course test scores, and to also include the student whose pre and post course test scores showed the greatest negative change.

At the beginning of each interview, students were informed that "the primary purpose of this interview is to gain information about your perceptions of how the reading strategies course you took last year has impacted your current reading practices. " A set of survey questions provided a structure for the interview while also allowing an opportunity for students to elaborate, creating a picture of their own perceptions of their

experiences. Each of these students was eager to tell his story. Hopefully, their unique voices will begin to paint a picture of the impact of the reading strategies elective.

Aleco, student number 008, was already performing above the 50th percentile but was identified by his teachers as a student who could benefit from participating in the course. Although he was reluctant to give up his "fun" elective for a semester, concerns about his grades and the challenges of high school convinced Aleco that he should participate. An outgoing, outspoken and inquisitive individual, Aleco was always one of the first to volunteer to read aloud in both history and English class, reading passages with great feeling and fine pronunciation. However, during independent reading, his teacher noticed that his rate of reading was below that of his peers. Aleco's English, science, and history teachers all thought that his low test scores were attributable, at least in part, to his rate of reading and poor comprehension.

Ms. Schaeffer remembers Aleco's initial reluctance well. She has often found that students whose test scores are at or above the 50th percentile express concern that they have been "wrongly singled out" and doubt that the course has much to offer them. When asked to "best represent the frequency with which you apply the reading strategies you learned in last year's course to your current academic reading practices in English class," Aleco chose "seldom," adding that he "already knew how to read stories well before the class." Interestingly, when asked the same question about science and history the response changed to "often" and "sometimes" respectively. Asking Aleco for an example or an explanation for his choice of adjectives elicited some interesting information.

While already aware of the important role a reader's predictions can play in both the enjoyment and understanding of a narrative, Aleco did not have a similar awareness and understanding of the strategies that promote successful and active reading of expository texts prior to the reading strategies course. Today, Aleco believes that the strategy of "reading the questions before the assigned reading" is particularly helpful in both history and science. He applies this strategy both to his homework assignments and has also found it to be a "useful test taking skill that Ms. Schaeffer taught me." Similarly, Aleco applies the "skimming strategy" he learned in the reading strategies course to enable him to complete assignments under increasing time constraints. When asked to elaborate on his "skimming strategies," Aleco again mentioned previewing the questions as well as focusing on headings, topic sentences, and pictures that can "help you understand the main ideas."

Aleco responded that he "often" approaches his academic reading assignments with confidence but "seldom" finds himself "truly interested" in his academic reading. Reflecting on the last academic reading assignment that captured his interest, Aleco detailed "a science article on evolution and the importance of 'Lucy' in understanding the development of primates" that he read a "few weeks ago."

Underscoring Ms. Schaeffer's commitment to developing an understanding of the individual personalities that make up the students in her reading strategies course, Aleco recalls that Ms. Schaeffer "helped me learn that I like reading books with magic in them." Experiencing success and enjoyment with novels by Phillip Pulman, and SE Hinton last year during the reading strategies course, Aleco proudly notes that he read *The Hobbit* over the summer and is currently reading *The Lord of the Rings* on his own. Becoming

aware that he "likes books with magic, mystery and suspense" has enabled Aleco to select books on his own.

The second student interviewed was Sam, student #006. "I'm doing great in high school," he immediately announced. When asked to reflect on the reading strategies course and assess the frequency with which he applies its lessons to his English, history and science reading, his response was "often" each time. Requesting examples, Sam's elaborate articulation of his own learning processes was impressive. The vocabulary decoding strategies have been of great use to Sam in his academic reading. "Instead of always stopping to get a dictionary, I've learned to read around words I don't know. That way I usually get a feeling for what it means." Additionally, Sam believes that the direct, vocabulary-building exercises imbedded in the SRA curriculum have helped him understand and identify more difficult vocabulary words.

Sam identified phonics instruction and frequent opportunities to read aloud as one of the most valuable elements of the course. Now, he "knows how to say the words right" and volunteers when an opportunity to read aloud in class is presented, without fearing that his words will not be understood. He also recalls that last year when he was called upon to read aloud, he remembered very little of what he read because he was so focused on pronunciation. Now, Sam believes that he can read for others while also comprehending the text.

"Just having the time to read," Sam believes provided him with the greatest benefits. "Another helpful thing was the journal entries. This gave me a chance to sit back and think about my reading and how I felt about it." When asked, Sam replies that he "often" approaches his academic reading assignments with confidence and is "often"

truly interested in what he reads for school. Sometimes, the reading is still pretty difficult but Sam concludes by saying that at least he now knows how to "figure it out."

Analysis of Results

In summary, the data generated by this study indicates that a middle school elective course that provides both instruction and practice in reading strategies has a positive impact on both the reading comprehension test scores and the academic reading confidence of the student participants. Results indicated that, on average, the reading comprehension percentile scores of the student participants improved 14.3 percent more than the students at the site who did not participate in the Reading Strategies course.

Application of a paired t-test to the NCE pre and post course test results of all 17 student participants indicates that these gains are statistically significant. The means and standard deviations for students' scores pre and post course are presented in the Table 5. The analysis of variance revealed a significant change in the pre and post test results: t=2.967, p value =.0045 with a confidence level of 95%.

Table 9

Variable	# of cases	Mean	Standard Deviation
Pre-course student scores	17	45.6	48.8
Post-course student scores	17	54.7	49.4

Analysis of the results also reveals that seventh grade participants who took the course in the spring experienced the greatest gains in their test scores when compared to the class as a whole, with the average national percentile score rising 22.7 percentage

points. The seventh grade class as a whole increased an average of 4 percentage points on the same test. Eighth grade participants who took the reading strategies elective in the fall experienced the second greatest gains in their test scores, rising an average of 15.4 percentage points. For comparative purposes, this average reading comprehension scores of the eighth grade class as a whole decreased 4 percentage points over the same period of time. Both seventh and eighth grade participants in the spring semester reading strategies course experienced smaller gains in test results than those of the fall participants. Eighth grade students in the spring gained 9.7 percentage points while seventh grade spring participants gained 9.4 percentage points.

Analysis of these results must include consideration of a significant confounding variable: spring students had not completed the last 6 weeks of the course prior to the April 2002 administration of the Stanford 9 Reading comprehension test. In contrast, the fall semester participants had completed the course in its entirety. This confounding variable suggests that fall participants should only be compared to fall participants, and spring participants only to spring participants. Additionally, this confounding variable leaves an important question open to interpretation: Would the gains of the spring participants have been closer to those of the fall participants if the test had been administered after the completion of the course?

The study also supports identifying the course participants through multiple measures: standardized test results, as well as administrative and teacher recommendations. Importantly, the discussions that occur prior to the course among administrators, parents, and students are an important part of the process and may contribute to the results presented.

Comparison of Findings with Existing Studies

This study tends to confirm the results reported in Greenleaf et al. (2001). In the aforementioned study, students who participated in an Academic Literacy course from October to May gained, on average, two years of reading growth on a standardized test of reading comprehension. This ninth grade participant group began with an average reading level comparable to that of late seventh grade; post test scores show that a this same group measures at the late ninth grade level. Greenleaf's study includes a t-test showing that this study has statistical significance. These researchers isolated for the variable of teacher placement, and their results revealed that this had no statistical significance. Interestingly, the two lowest scoring groups in the fall, primarily Latino students and Southeast Asian second language learners made the largest gains.

Not only do the results of this study tend to strengthen those of to Greenleaf's, they also suggest that a focused course in reading instruction can also have a positive impact at the middle school level. Both studies also confirm the results of recent research suggesting academic literacy can be increased by establishing relevance, using context clues for decoding vocabulary, providing time for reflection, modeling reading processes through reading aloud, personalizing reading recommendations for struggling adolescent readers, and educating adolescents about the structures of expository texts. Taken together, these studies also provide a strong rationale for the important role a teacher can assume as a reading mentor.

Limitations

Analysis of the results must also include an awareness of the limitations of this study. The test results reported may have been influenced by factors not addressed in

this study. Student participants also received English instruction in their individual seventh and eighth grade language arts courses over the year. At both grade levels, three separate teachers provided this instruction. Test results were not grouped and analyzed by the language arts teacher of the student participants, although this variable could have had an impact on the reading comprehension results.

Socio-economic status, ethnicity, and gender are also variables that were neither isolated nor addressed. The possibility exists that the course was more effective for males than females, or vice-versa. Additionally, this study did not focus attention on the socio-economic status of the participants and how this variable may have influenced their experiences of the course. Ethnicity also plays an important role in an individual s experience of life and education, and this study did not control for the impact this variable may have had on the data presented.

Most importantly, the results of this study are limited by the small size of the participant group. Individual experiences that have not been controlled for may have impacted the data of one student substantially. In turn, because of the small sample size, uncontrolled variables could also impact the results of the study.

Overall Significance and Implications for Future Research

The results of this study are relevant to policy makers, school administrators, educators, and parents who are concerned about the academic literacy of today's adolescents. Amid the great concern that only 33 percent of eighth graders and 40 percent of seventh graders perform at or above a proficient level of reading, and a mere three percent of eighth graders and six percent of twelfth graders read at an advanced

level (Donahue et al.1998), this study provides a framework for developing policies and programs that may promote the reading growth that enables students to succeed in advanced level coursework. Literacy achievement and effective reading habits enable individuals to achieve socioeconomic mobility and to fulfill important civic responsibilities like voting and serving on a jury. Although educators bear a significant responsibility in helping students achieve the advanced literacy necessary for success in an era where complex communication skills are essential, the success or failure of the educator's mission dramatically impacts the greater society beyond the school.

Middle and high school administrators, along with others charged with the responsibility of designing school curriculum may want to refer to this study when determining how to best address the issues struggling adolescent readers in their school community face. Perhaps the framework of the Reading Strategies elective course will provide a starting point and a rationale for supporting these students outside of the regular English classroom.

Middle and high school teachers may consider drawing from this study to promote reading growth in their respective subject-area classrooms. Their administrators may want to consider providing professional development opportunities to facilitate this process. The research presented suggests that students may require more direct instruction in the skills required for advanced-level academic reading. Since most adolescent students do not have a designated reading teacher, perhaps there is a need for science, history, English and math teachers to model and instruct students on the strategies they can use to better comprehend the content-specific reading they will encounter as they advance.

Researchers may find this study useful in providing direction for further studies that will be essential to the creation of successful programs that address the literacy needs of adolescents. Certainly, the data provided suggests that struggling readers may benefit from the Reading Strategies elective, or a similar course. However, further research is needed to determine if those students who meeting the grade level expectations for reading could also experience growth with the application of similar instruction.

Without question, a larger study of this nature would also provide valuable information about the effectiveness of the Reading Strategies elective. If a substantially larger study produced similar results, the implications for policy makers would be far more powerful than this study of limited magnitude.

As a community of citizens it is our collective responsibility to do all that we can to ensure that students develop the literacy skills that foster full participation. Underperforming readers need to be made aware of the learning and life opportunities they will miss as a consequence. Success in advanced–level academic coursework enables individuals to fully participate in the promises of our democracy. And if we, as a nation, are truly committed to equality of opportunity, we must develop and fully fund programs that provide a path that leads struggling, adolescent readers to proficiency - and beyond.

References

Collins, N., (June 1996). Motivating Low Performing Adolescent Readers, ERIC Digest.

Donahue, P., Voelkl, K., Campbell, J., & Mazzeo, J. (1999). *The NAEP 1998 reading report card for the nation and the states.* Washington, DC: National Center for Education Statistics.

Goldenberg, Claude. (May 2000). "The voices of researchers: Conflict and consensus in rereading research and policy."*The Reading Teacher* , Volume 53, N# 8, , pp.640-641.

Greenleaf, C, Schoenbach, R., Cziko, C., & Mueller, F. (Spring 2001). Apprenticing Adolescent Readers to Academic Literacy. *Harvard Educational Review, Volume 71 No. 1.* pages 79-127.

Kwon, Jean K., "Using Film Adaptations of Novels to Promote Critical Thinking and Recreational Reading in Middle School Students," *28 Takes on 21st Century Literacy Instruction.*

Nishihara , Bonnie, "The Classroom as a Literate Environment," *28 Takes on 21st Century Literacy Instruction.*

Publication Manual of the American Psychological Association, 5th edition, American Psychological Association, Washington, DC, 2001.

Traub, James, (November 10, 2002) "Does it Work," *New York Times-Education Life,* Section 4A, pages 24-27.

Vygotsky, L. (1978). *Mind in Society: The Development of Higher Psychological Processes.* Cambridge, MA: Harvard University Press.

Wood, Karen, (May 1998). "Helping Struggling readers read. Research into Practice," *Middle School Journal .*

Appendix - Student Interview

Allow me to begin my telling you that your participation in this interview is both enormously helpful and purely voluntary. I want to thank you for your willingness to be part of this study and remind you that you are free to withdraw at any time without incurring any negative consequences.

The primary purpose of this interview is to gain information about your perceptions of how the reading strategies course you took last year at Del Mar has impacted your current reading practices.

1. Which of the following adjectives best represent the frequency with which you apply the reading strategies you learned in last year's course to your current academic reading practices in English class?

Often Sometimes Seldom Never

2. Could you offer either an example or an explanation of your response?

3. Which of the following adjectives best represent the frequency with which you apply the reading strategies you learned in last year's course to your current academic reading practices in history class?

Often Sometimes Seldom Never

4. Could you offer either an example or an explanation of your response?

5. Which of the following adjectives best represent the frequency with which you apply the reading strategies you learned in last year's course to your current academic reading practices in science class?

Often Sometimes Seldom Never

6. Could you offer either an example or an explanation of your response?

7. Which of the following adjectives best represents the frequency with which you approach your academic reading assignments with confidence?

Often Sometimes Seldom Never

8. Which of the following adjectives best describes the frequency with which you find yourself truly interested in your academic reading?

Often Sometimes Seldom Never

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