Adolescent Literacy Literature Review

There is a growing concern in the U.S. about today’s adolescents’ insufficient literacy skills. In particular, high school students from “disadvantaged” families (racial minority, poverty, low parental educational levels) appear to lag behind in their ability to read and write well enough to meet demands of the modern society. Reading comprehension is a key to being comfortable with texts encountered in school, at work, and in everyday life. Research studies have for a long time described instructional factors that seem to be effective in teaching reading comprehension (Wenglinsky, 2003). Some of these factors are included among the NAEP reading-specific background variables.

National Assessment Governing Board (2003) states that analysis of NAEP background variables can provide valuable information to the knowledge base of the field because these variables describe contexts for learning and the distribution of educational resources among the subgroups. According to Barton (2002), the non-cognitive variables related to specific subject instruction were selected by committees advising on this subject matter assessment. Barton states that if we explore issues related to the subject matter content of instruction, we could better understand how rigorous classroom teaching might be under various circumstances. The proposed study has a potential to determine how certain established instructional reading comprehension strategies are used in different schools and with different subgroups of students.

Although, clearly, reading achievement of twelve-graders is influenced by much more that the instructional practices used in their most recent school year, it is worthwhile to determine whether there are correlations among a combination of these practices, school and demographic factors, and reading achievement, especially in the area of reading for information. Another aspect of this question is whether these factors are equally reported by students of different races and socio-economic status. The uniqueness of NAEP data (as the only nationwide assessment of adolescent reading achievement) will provide a wealth of information that can contribute to the knowledge base about today’s reading instruction and achievement gap. Although we by no means set a goal of establishing a direct causal link between NAEP background factors related to instruction and 12th grade student achievement, the results of this study will still contribute to the knowledge of instructional contexts, especially as used with disadvantaged student populations. Should we find a relationship between the reading scores and a combination of background variables, further investigations, perhaps utilizing additional sources of data, could explore the nature of that relationship in greater depth.

According to the National Commission on NAEP 12th Grade Assessment and Reporting (2004), the 12th grade NAEP student achievement results are important and need to be reported and analyzed. The 12th graders are getting ready to enter the adult world of employment, citizenship, and postsecondary education and training. What they have learned in high school should help them in this transition. NAEP is the only nationwide assessment that can provide a reliable indication whether today’s 12th grade students are well prepared for the adult life, which poses many requirements associated with reading and literacy. NAEP can also help track over time the trends of high school students’ skills and readiness.
Various researchers have addressed the significance of using the NAEP reading-specific variables and background variables (Wenglinsky, 2003). The relationship between NAEP reading-specific background variables and achievement has previously been reported by NCES (Fourth grade reading highlights, 2001). Underwood and Pearson (2004) used NAEP reported relationship between NAEP reading-specific background variables and reading achievement scores in their research, stipulating that “these are broad correlational findings but they come with the support of research” (p. 138).

Barton (2002) in Perspectives on background questions in the NAEP: Report to the National Assessment Governing Board proposes “that NAEP be used to track trends in factors and conditions that have already been reasonably well established by the research community to positively or negatively affect educational achievement (or to express it alternatively, to track trends found to be strongly associated with achievement)” (p. 6). Barton goes on to assert that, [Although] a statistical agency reporting associations does not claim to establish causality… a research scientist advancing a hypothesis based on theory and accumulated research findings, and subjecting that hypothesis to empirical testing, may well lay claim to having explained a phenomenon. The finding may become accepted after being replicated by others. An extended discussion would eventually reach the question of the validity of applying the physical science model to social phenomena (p. 6, footnote).

Mullis (2002) suggests that background questions can be used to analyze differences between different population groups. Collecting subject-specific and other information about educational contexts for learning can inform educational policy about opportunities to learn that are experienced by all groups of students. These contexts include the curricular content, instructional practices, and various in-school as well as beyond-school factors that might influence the learning process and student performance. The analysis can provide information about what strategies, activities, and approaches are being practiced and whether schools are implementing the instructional practices that are recognized and considered effective by existing research.

Background information about educational settings and experiences also can help researchers and policy makers understand the “achievement gap” in performance of students from advantaged and disadvantaged families. Analysis of contextual variables can show how important instructional approaches and resources are distributed among different groups of students. This is particularly vital now, when educational researchers and policy makers voice a serious concern about the state of adolescent literacy in this country.

Problem of Adolescent literacy

The problem of low levels of literacy among our nation’s adolescents is enormous and getting worse because the stakes are climbing higher. This nation is confronted with the realities of low literacy levels among many young adults, while at the same time facing the growing imperative of providing everyone with a high-level education that includes training through and beyond high school.
Moreover, the literacy crisis threatens to derail the ongoing implementation of standards-based reforms and to regress on advances in academic achievement that have already been made. The goals of improving adolescent literacy and achieving success in standards-based reform are inextricably intertwined. (National Association of State Boards of Education, 2005, p.7)

Tennessee state education leaders met with the Commission on NAEP 12th Grade Assessment and Reporting on January 14, 2004. They reported to the Commission that about 45-55 percent of college freshmen admitted to 4-year and 2-year institutions have to enroll in remedial courses in reading, writing, and mathematics because they lack skills needed for college-credit coursework. Research shows that students who begin their postsecondary studies with remedial courses are less likely to graduate from college and will have more difficulties finding employment. Moreover, in the future their income is likely to be less than that of other college graduates. Tennessee educators stressed the importance of NAEP data to help them learn about the performance of their 12th graders (National Commission on NAEP 12th Grade Assessment and Reporting, 2004, p 2). According to Slater (2004), if we expect high school students to succeed in postsecondary education and competitive work environment, many more should score at the Advanced level, based on NAEP data, than on Basic or even Proficient NAEP levels.

Insufficient literacy skills are a growing problem among today’s high school students. Adult Basic Education and Literacy teachers see more and more 17-19 year olds in their classrooms. Many of them have dropped out of high schools; some have graduated but still found themselves unable to adequately perform in today’s environment of increased literacy demands. It is not uncommon to find a twelfth-grade dropout or even a recent graduate score below secondary level on a reading section of a test such as the Test of Adult Basic Education.

Among the causes of reading problems in grade 4 through 12, the National Governors Association Center for Best Practices (Berman and Biancarosa, 2005) named:

- Decreased motivation to read
- Inadequate opportunities to develop vocabulary, background, and content knowledge
- Lack of access to comprehension instruction
- Increasing reading and writing demands across the curriculum
- Reading and writing instruction disconnected from content-area literacy demands
- Reading and writing instruction not seen as province of middle and high school instruction
- Lack of widespread support for adolescent literacy.

According to Jetton and Alexander (2004), one of the problems faced by high school students is that, as the texts they are expected to read and understand become increasingly difficult, academic supports in forms of reading instruction become limited. Pressley (2004), who conducted observations in several schools, observed few comprehension strategies being employed in high schools. This issue becomes exacerbated when it comes to students traditionally described as “disadvantaged” and schools that serve these populations.

Achievement Gap
For many years, NAEP data have been used to demonstrate the trends in the differences between achievement of advantaged and disadvantaged groups of students (Mullis, 2002). Snow and Biancarosa (2003) in their report, largely grounded in 2003 NAEP data, state that “certain groups continue to perform significantly below expectation at the upper elementary and high school levels: these groups include African-Americans, Latinos, students whose first/home language is not English, and youngsters living in poverty” (p. 2). Snow and Biancarosa (2003) examined the achievement gap between students from advantaged and disadvantaged groups in relation to current instructional practices in reading. Many researchers agree that in early grades children learn to read, while in later years they are expected to read to learn, although both processes continue to require instructional assistance throughout the entire educational career. To become proficient readers, it is imperative for adolescents to be able to utilize comprehension strategies. Snow and Biancarosa note that adolescents who come from impoverished and/or minority backgrounds, or are English language learners, experience more difficulties in developing reading proficiency and other literacy skills.

According to the recent report by RAND Education for Carnegie Corporation of New York, there were large achievement gaps on reading and language arts state assessments, both required and not required for graduation among high school students by socioeconomic status and by race/ethnicity. The scores of economically disadvantaged adolescents were 7-30% lower than those of other students. The range of the achievement gap between White students and African American students was 5-42% and between White students and Hispanic students, 9-37% (McCombs, Kirby, Barney, Darilek, & Magee, 2005). According to Johnson (2004), recent studies established that the percentage of economically disadvantaged adolescents who drop out of high is significantly higher and officially reported rates, especially because the official reports do not usually include data disaggregated by race or socio-economic status.

Greenleaf, Schoenbach, Cziko, and Mueller (2001, as cited in Grady, 2002) have stated that there are persistent gaps in student achievement between students who are members of the dominant culture and those who are not. According to Grady, researchers from the fields of sociolinguistics, cultural anthropology, and critical pedagogy demonstrated the connection between classroom strategies and the social and cultural contexts of students’ school and home lives from which their background knowledge comes and needs to be activated to enable them perform with success academically.

Snow and Biancarosa (2003) posit that differences among adolescent readers may consist of differences between readers, differences within readers, socio-cultural differences, and group differences. Any of these can result in lack of reading success, but the socio-cultural and group differences come closest to explaining the literacy gap. According to Snow and Biancarosa, the role of text in adolescent literacy is vital. Subject matter must appeal to varied interests, background knowledge and abilities of adolescent readers. Since the motivation to read and learn seems to diminish in the middle school year, while the need to be able to comprehend a multitude of increasing difficult materials and for increasingly varied purposes continues to grow, it is essential that high school students are exposed to the variety of comprehension strategies that teachers help them use productively. The adolescence is also the time of life when the sense of identity and of membership in certain social and cultural groups is established. An adolescent coming from a marginalized, impoverished background
may experience further and further discrepancy between his or her own knowledge and culture and the school expectations. This may lead to a real struggle as such adolescents strive to become literate in a society dominated by literacy, but from which they are alienated. Students comprehend better when the topic is relevant and related to at least some background knowledge; when they perceive the text they are expected to read are not interesting, students find them difficult to connect to. Therefore, flexible activities that help such students connect with texts they are reading are a must in high school classrooms.

Analyzing the reasons for the achievement gap and high dropout rates for African American high school students, Hale (1994, as cited in Hynds, 1997) concluded that “unstimulating instruction causes disconnection from school for African American children.” (p. 220). Brinkley and Williams (1996), in their analysis of results of the International Association of Educational Achievement (IEA) Reading Literacy Study refer to existing research that relates lower achievement of Black students with lower level of instruction, as well as the disparity between the culture and the language of the home and the school that minority students may experience (according to Bean and Harper 2004, this disparity is borne out in many research studies). Brinkley and Williams also comment on the fact that racial and socio-economic factors should both be taken into account when analyzing the achievement gap.

The problem of lower academic performance by poor minority children, caused in part by the lack of correspondence between their home and school culture, led Johnson (2004) to conclude that, to become academically successful these students need “critical literacy” skills. Johnson emphasizes need for approaches that help children and adolescents develop a capacity of reflecting on their experience and the texts read and of making connections between the two. Interpretive reading and writing activities, reflection, and critical questioning should be a part of their school experiences. However, “schools that serve children of color, children who are poor,… and those raised in homes where standard English is a second language” are “first in line for a truncated curriculum [that marginalizes] writing, literature, critical thinking, interdisciplinary studies” (Johnson, 2004, p. 56).

According to Barton (2002), there are “possibilities [in NAEP data analysis] to the use of background questions to track the kinds of indicators that have been reasonably well established by research to be related to student achievement.” (p. 11). Barton continues to say that these variables could be utilized to describe “the characteristics of children who are ‘left out’ and therefore are at risk of being ‘left behind.’ Achieving greater equality in educational achievement is dependent on equality in access to conditions that are supportive of educational achievement” [underline Barton’s], (p. 12).

This study will attempt to investigate whether instructional practices listed among NAEP reading-specific background variables are equally utilized with students from different subpopulations. We will also explore the nature of the relationship, for different subgroups, between background variables and reading achievement. Although limitations exist that prevent us from firmly establishing causality, the above-mentioned relationship is still worth exploring, especially because NAEP reading-specific variables have been developed by a committee of experts (Barton, 2002) and appear to be confirmed by accumulated research findings.
Adolescent Literacy: Reading-specific background variables

Aflerbach (2004) suggests the following definition for adolescent reading:

Adolescent reading involves the use of skills, strategies, and prior knowledge to construct meaning from text. Adolescent readers continue to develop the ability to construct meaning from text, and use and reflect on the information gained from written texts, so that they may achieve goals, develop knowledge and potential, and participate in society. (p. 372)

Adolescent literacy has been an area of study and action for several decades. Early theories held that teachers somehow transmitted increasingly complex knowledge and skills to students. As a research base developed, theories expanded to view readers as more active, interacting with text, making inferences and applying information to existing knowledge. This interactive view of literacy included cognitive and social aspects as well as relationships between readers’ background knowledge and ability to make sense of a topic. Today’s transactional theories of adolescent literacy see readers as even more actively engaged. Readers are expected to compare information from text to information they already know, and to read in order to find answers to their own questions. (Brinkley & Williams, 1996.)

If we accept the current, transactional, theories of literacy, we look for active, engaged reading practices. We expect readers to consciously prepare for reading by establishing a purpose and calling up existing knowledge against which to weigh new information. We expect readers to be strategic, monitoring themselves as they read and altering their practices if they are not getting the information they need. We expect them to follow the reading by utilizing new information to expand or validate existing knowledge. We expect teachers and learners to work collaboratively to explore social, personal and cognitive aspects of knowledge building (Grady, 2002).

The current emphasis on evidence-based practice affords a means of identifying effective reading practices. The National Reading Panel (2000) examined research into four elements (alphabetics, fluency, vocabulary, and comprehension) of children’s beginning reading. Kruidenier (2002) examined research in the same four elements for adult beginning readers. There is sufficient congruence in the findings of the two reviews to be able to extrapolate from them to adolescent readers.

We will focus here primarily on reading comprehension strategies, since NAEP reading-specific background variables are related to reading comprehension, rather than decoding. According to Underwood and Pearson (2004) by the 12th grade the majority of students are expected to be reasonably proficient in decoding and fluency, although many still experience comprehension difficulties. Hynds (1997) makes a valid point when she mentions that most of the high school reading is for information purposes. Comprehension, therefore, is the key for successful performance.

Kruidenier (2002) advocates that teachers provide explicit instruction in reading comprehension strategies. Such strategies include:

- Use of headings
Verbal summaries
Monitoring comprehension
Self-questioning
Skimming

Kruidenier further suggest providing instruction in comprehension in conjunction with other reading elements, and using computer assisted instruction.

Kruidenier’s recommendations match those of the National Reading Panel (2000) for explicit instruction in:
- Question generating and answering
- Comprehension monitoring
- Use of graphic and semantic organizers, story structure
- Summarizing
- Multiple strategy instruction

The National Reading Panel further suggests engaging learners in cooperative learning, tasks involving active reader involvement, scaffolding new learning and encouraging use of flexible, combined comprehension strategies.

Other researchers support Kruidenier’s conclusions. Slater (2004) suggests generating questions, clarifying, summarizing, making predictions, reading authentic texts and asking students to work together as effective supportive strategies for content learning through reading. Porter’s (1998) compilation of six NCTE commission reports argues for broader conceptualization of literacy. While interactions between reading and writing and between reading and speaking are not included in the two major research review documents, there is evidence that connecting these communication processes results in knowledge production. Porter notes the critical roles reading and writing play in connection with one another and argues for broader, more encompassing definitions of reading. She also notes that emphasis on ‘rote learning’ limits reader activity and disproportionately impacts low achieving students and minority populations.

What does research tell us about the various instructional practices surveyed in NAEP 12th grade reading? Information on reading in content areas reached a critical juncture in 1970 when Herber in his book *Teaching Reading in the Content Areas* differentiated “between literacy development as reading instruction and literacy development to support subject matter learning” (Grady, 2002). Comprehension instruction that promotes strategic behaviors to encourage active and purposeful reading and writing (something that most struggling readers have trouble with) should not only be taught explicitly, it should be incorporated into content area teaching, beginning in the early grades and continuing through high school (National Association of State Boards of Education Study Group of Middle and High School Literacy, 2005. p. 5).

Among other practices, Berman and Biancarosa (2005) suggest direct comprehension strategies, reading instruction that is included in and reinforced across content areas, guided interaction with texts in groups, diversity of reading materials, and intensive writing as well as using real world applications. Grady (2002), based on her analysis of existing research, concludes that integrating problem-solving, reading and writing tasks, and academic content will lead to increased comprehension, knowledge gains, and improved performance.
Both Snow and Biancarosa (2003) and the Language and Learning Across the Curriculum Committee of the National Council of Teachers of English in (1997) recommend a diversity of texts for content-area reading, questioning strategies, working in groups, journal writing, and subject-specific writing logs. As mentioned above, Kruidenier (2002) summarized best practices for teaching reading comprehension and found a combination of summarizing and questioning strategies to be effective.

Shanahan (2004) recommends a variety of writing activities to help students accomplish learning. Swan (2004) includes reflecting on and evaluating what is read, making personal connections to the text, and sharing with others as components of reading to learn. In her description of an effective classroom, she mentions working on projects about something that is read, as do Moje and Hinchman (2004).

The Center for Youth Development and Education (CYDE) compiled a variety of resources about literacy and language instruction for adolescents:

- Cooperative learning environments designed for students to discuss reading in groups
- Teaching components that enable students to evaluate texts
- Developing understanding through exploring multiple perspectives or points
- Dialogue or discussion... using summarizing, questioning, predicting, and clarifying strategies in reading for meaning
- Reflection activities, “thinking out loud” about texts
- Opportunities for students to generate and answer questions that encourage higher-order thinking
- Increasing the amount that students read
- Reading taught as problem-solving
- Integrating strategies across content areas
- Writing activities and projects, such as a newsletter or a magazine, journal writing creative writing, book reports.
- Project-based learning
- Displays of work.

Hynds (1997) stresses the importance of interpretation activities; that it is important to teach students to understand what they are reading in the context of their own experiences and existing knowledge. She also points out the importance for adolescent students to collaborate with others, engage in meaningful tasks, and use activities targeting the skills of reading, writing, speaking, and listening.