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Cecil M. Smith

Janet K. Sheehan-Holt
Northern Illinois University

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Does Basic Skills Education Work? Some Evidence from the National Adult Literacy Survey

M. Cecil Smith
Janet K. Sheehan-Holt

Northern Illinois University

There are many education programs offered for adult learners who need to improve their basic skills for reading, writing, and mathematics, including adult basic education, adult secondary education for high school dropouts (GED), and English-as-a-Second-Language classes. These programs are provided in a variety of settings, including the workplace and the community-at-large (e.g., libraries, community colleges, voluntary and social-service agencies). Generally, these programs are designed to help adults acquire and use literacy, or earn a diploma, and thereby, achieve personal goals, such as attaining gainful employment.

Educational attainment has been shown to contribute to the development of literacy in the general population--termed a literacy development effect (Reder, 1998). Because the demands for literacy increase exponentially as individuals proceed through school (Guthrie & Greaney, 1991), it is assumed that when individuals complete their schooling they are fully literate. Clearly, schooling not only drives the development of individuals' literacy skills, but also contributes to the kinds of reading practices in which they engage (e.g., reading books, periodicals, and documents for different purposes). From the primary grades on, students encounter many different texts, from basal readers to literature, and printed documents in and outside of school. Some students, of course, do not acquire sufficient literacy skills and practices, and leave school reading several years below grade level, or are unable to read at all. Eventually, many of these persons end up in adult basic skills programs to improve their literacy.

Programs' outcome assessments are typically based upon students' standardized test scores (e.g., the Test of Adult Basic Education). Test scores, however, do not adequately capture the complexity of adults' literacy skills and uses. Attainment of the GED is another widely-used criterion for literacy, but the GED Test is limited to a few knowledge areas and does not assess literacy skills or practices. Other evidence of students' literacy gains are offered by students and instructors through their testimonials of program or instructional efficacy (Beder, 1999; Dillon-Black, 1998), but anecdotal evidence cannot be generalized to the basic skills population.

Generally, most adults participate voluntarily in adult education, although in some cases individuals are required to enroll in basic skills classes. Fewer than ten percent of eligible adults actually take part in any of the basic skills programs that are offered, however (Pugsley, 1990). Researchers have investigated the reasons underlying adults' reluctance to enroll in adult education. Often, these reasons pertain to perceived barriers to education, such as the time required and economic and personal costs (Darkenwald, Kim, & Stowe, 1998) and lack of self-

confidence, and personal problems such Norman, 1996; Ziegahn, 1992). It is much less certain that adults actually increase their literacy skills as a result of basic skills education.

Good literacy instruction should provide many opportunities for adults to practice their literacy skills both in and out of class. All too often, however, instruction is limited to workbook assignments containing drill-and-skill activities having little connection to literacy outside of the classroom (Solorzano, Stecher, & Perez, 1989). Studies examining the effects of literacy instruction on the development of adults' reading practices are rare. There is evidence that reading instruction influences students' reading practices, but these studies have pertained to school-age children (Cline & Kretke, 1980; Collins, 1980; Elley & Mangubhai, 1983; Ingham, 1981), not low-literate adults having negative educational experiences.

The findings from several empirical investigations of basic skills programs, and the measured improvements in adults' literacy skills and practices following participation in these programs, are inconclusive. Friedlander and Martinson (1996) used a randomized experimental design to estimate the effects of a basic education program on adults' literacy achievement. Data were gathered on participants in California's Greater Avenues for Independence (GAIN) program. Enrollees were randomly assigned to a program or control group. Standardized literacy achievement test data showed no group differences following instruction. Venezky, Bristow, and Sabatini (1994) studied enrollees and dropouts from adult literacy classes over one school year. Significant growth was found in functional literacy, but there were no gains in basic reading (i.e., comprehension and vocabulary), and declines were observed in quantitative literacy.

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We recently completed a study (Sheehan & Smith, in press) using data from the National Adult Literacy Survey (NALS), to investigate the associations of participation in basic skills education to literacy skills and reading practices. While the results of our investigation are correlational, we employed the most sophisticated data analysis methods possible to ascertain the possible effects of participation on adults' literacy. The NALS is the largest study of adults' literacy ever conducted in the United States. Data were gathered on a nationally representative sample of more than 26,000 adults, ages 16 and older, in 1992. Participants completed both a literacy

assessment and a background interview that obtained information on demographic variables, labor force and civic participation, and literacy practices. The literacy assessment measured adults' abilities to read, understand, and use information in prose, documents, and quantitative materials.

We focused only on respondents who reported having participated in basic skills (e.g., reading, writing, and arithmetic) programs at some time prior to, or concurrent with, their completion of the NALS assessment (ten percent of the NALS sample). Because of the ex post facto nature of the design, we employed a set of control variables (e.g., educational attainment, age, race, labor force participation, primary home language) to account for the selection bias in the study (i.e., those in basic skills programs are more likely to have low skills upon entry than nonparticipants). The control variables served as a proxy for literacy skills prior to entering a basic skills program. Because the three NALS literacy scales are highly intercorrelated (Reder, 1998), we focused only on the prose scale. We also created five reading practices scores for each type of reading material (i.e., newspapers, magazines, books, personal documents, work documents) that respondents reported reading on the background survey, and examined the associations of these practices to basic skills participation.

Hierarchical linear modeling (HLM) was used as the data analysis technique, because it provides accurate estimates of relationships among variables in cluster-sampled surveys like the NALS. The NALS method used geographic regions called probability sampling units (PSUs) in which groups of neighborhoods, households and individuals were randomly selected. HLM allows random variations in literacy skills and practices due to "neighborhoods," (or any other sampled unit) to be accounted for when examining relationships among the variables.

Our findings showed that there were no significant differences in prose literacy between basic skills participants and nonparticipants, but participants read significantly more materials for four of the five reading practices. Only newspaper reading was unrelated to participation.

Conclusions and Implications for Adult Education

Although studies have demonstrated gains for some specific literacy skills (Venezky et al., 1994), and others have documented adults' attainment of tangible indicators of functional literacy, such as the GED (Darkenwald & Valentine, 1985; Friedlander et al., 1996; Smith & Locke, in press), the research to date does not indicate that there is any effect of adult basic skills education on literacy skills (Beder, 1999). The results of our study also support these findings. Several studies have shown, however, that basic skills programs can impact participants' attitudes, lifestyles, and behaviors such as reading practices (Fitzsimmons, 1991; Malicky & Norman, 1996; Stanfel, 1996). This leads us to ask, "Is it sufficient for adult basic education to change attitudes and behaviors but not participants' general literacy skills?"

Beder (1991) suggests that a goal of adult literacy programs is to achieve the larger social benefit of a nation of individuals whose lives are improved through increased literacy. Clearly then, a critical evaluation of adult basic education programs is warranted because research findings do not support the claim that these programs lead to improved literacy. This may not be a reasonable goal, however, in the current landscape of adult education. Because adults often set

their own learning goals and enter and exit programs as they choose (Venezky et al., 1997), it is difficult to ensure that all participants receive instruction that is sufficient to improve their literacy skills.

Recently, adult literacy researchers have suggested shifting basic education from a model emphasizing literacy instruction for all, to a personalized model in which learning is situated in social contexts (Lankshear & O'Connor, 1999; Wagner & Venezky, 1999). The proposed model envisions learners engaged in real-life literacy tasks, rather than decontextualized skills, and instruction tailored to individual goals. Such a model is not without its problems, however. Unless instruction is centralized, program coordination may be too complex. Further, program evaluations become more difficult, requiring adoption of criterion-referenced assessment tools rather than standardized tests, and such changes may weaken accountability. These issues should not drive the instructional design, however. Adult basic skills education must be modeled on current research that demonstrates how adults can best achieve full functional literacy.