Adult functional illiteracy is estimated at more than 20 percent of the U.S. population and 12-19 percent of Indiana residents over age 25 (390,000 to 600,000 adults). In addition, high school dropouts and those who do not seek education past high school also need additional training. Functional illiteracy costs government and business through industrial accidents, lost productivity, direct training costs, lost earnings, unemployment expenses, and the cost of operating prisons. The price of illiteracy too often also includes unemployment and even crime. Government has long played a role in literacy education. At the turn of the century, the federal government helped to assimilate immigrants, and many other federal literacy initiatives have been undertaken, including the National Literacy Act of 1991. Indiana has five state-level agencies contributing to literacy: the Indiana Adult Literacy Coalition; the Governor's Voluntary Action Program; the Indiana Department of Education, Division of Adult Education; the Indiana Department of Workforce Development, Office of Workforce Literacy; and the Indiana State Library. Although Indiana has made progress in adult literacy, literacy programs are still reaching only about 7 percent of the target populations. Policymakers and program developers should consider the following: adult culture, multidimensional needs, diversity, postsecondary education, business efforts, program collaboration, the balance between volunteers and professionals, establishing a superintendency of adult education, and its literacy networks when developing policies and programs to improve adult literacy in Indiana. (Contains 20 references.) (KC)
Adult Literacy in Indiana

by Caroline Beverstock, H.S. Bhola, and Anabel Newman

Adults who cannot read or write well enough to meet their personal needs or the demands of society and the workplace are all too common in Indiana. Functional illiteracy—the inability to meet personal objectives in a print culture despite schooling—can lead to feelings of frustration and powerlessness.

People who cannot read often become passive and may feel isolated. The functionally illiterate adult usually cannot be a fully contributing member of his or her workplace or community. Yet an adult who cannot read the instructions on a medicine bottle or fill out a job application may develop remarkable skills for coping in a print culture and concealing the problem.

Literacy requirements have changed as society has become more complex and technologically advanced. At the beginning of this century, the ability to read at the 4th-grade level was sufficient for an American citizen to participate fully in everyday life. In today’s “information age,” a person without a high school diploma lives with serious constraints. Ninety percent of jobs require some reading and writing. Moreover, the reading demands of the workplace are different from and more complex than those typical in schools, usually requiring at least 10th- to 12th-grade level reading skills (Mikulecky, 1987).

The Extent of Functional Illiteracy

Based on national surveys of literacy conducted in the 1970s and 1980s, it is estimated that over 20% of the U.S. population and 12% to 19% of Hoosiers over age 25 (390,000 to 600,000 adults) cannot read or write at a functional level (Indiana Adult Literacy Coalition, 1989b; Shepherd, 1988). More accurate, up-to-date estimates of the extent of functional illiteracy across the nation and in Indiana will be available in late 1993 or early 1994, with the release of the results of the National Adult Literacy Survey. This survey is being conducted by the Educational Testing Service in response to a 1988 Congressional mandate that the U.S. Department of Education provide a definition of literacy and an estimate of the extent of adult literacy in the nation (U.S. Department of Education, 1990). The survey will provide estimates of the number of functionally illiterate adults and the rates of specific literacies among adults (e.g., prose, document, and computation literacy).

More than 1 million (34%) Indiana adults over age 25 did not complete high school, according to 1980 census data. Of that group, 58,000 had fewer than five years of schooling, and 519,000 had fewer than nine years of schooling (Indiana Adult Literacy Coalition, 1989b). One in four of the students admitted to Indiana’s post-secondary institutions need remedial instruction (R. Keith, Hotline Coordinator, Indiana Literacy/Technical Education Resource Center, personal communication, September 1992). In one central Indiana training program, more than 40% of those tested for retraining or upgrading of current job skills failed to meet minimum entry-level skill requirements (Indiana Adult Literacy Coalition, 1989a).
Of the 77,413 Indiana public school students enrolled in ninth grade in 1987-88, nearly 19% (17,567) did not complete high school four years later. Almost a third of those who graduated did not intend to go on to a postsecondary institution (P. Arney, Educational Information Systems Division, Indiana Department of Education, personal communication, September 1992). Combining the number of dropouts with those students not seeking four-year degrees, 52,000 students from this class will probably need some kind of post-high-school and/or vocational education to be satisfactorily employable. If these circumstances repeat in successive classes, at the end of the century a half-million young Hoosiers will need some type of additional education or training after high school (Cramer, 1991).

The Cost of Functional Illiteracy

Estimating the direct monetary cost of illiteracy to the state, the federal government, and business and industry is imprecise at best, but we can get a general picture from a study by the Canadian Business Task Force on Literacy, which estimated the cost of illiteracy to Canada using the following six categories: industrial accidents, lost productivity, direct training costs, lost earnings, unemployment expenses, and the cost of operating federal prisons. The task force concluded that Canadian business loses $4 billion or more every year and that the cost to Canadian society as a whole is approximately $10 billion per year (Canadian Business Task Force on Literacy, 1988). Because the United States' population is nine times that of Canada, these figures would most likely be proportionately higher in this country.

Functional Illiteracy

The term "illiteracy" is generally taken to mean the complete inability to read or write. While there are some people who cannot read or write at all, it is more often the case that a person can read or write some, but not enough to take on tasks requiring new reading and writing skills to fulfill personal or public objectives. "Functional illiteracy" refers to the difficulties people face when they are not literate enough to work in increasingly technological industry or to otherwise participate in the responsibilities and benefits of citizenship.

A U.S. study of basic skills in the workplace reported numerous instances of the high cost of functional illiteracy to business (Thomas, 1989). A large metropolitan telephone company, for example, conducting its first major recruitment campaign in over a decade, found that 84% of its applicants failed an entry-level test of vocabulary, number relationships, and problem solving.

When Indiana Governor Evan Bayh proclaimed September 1990 Literacy Month, he acknowledged that hundreds of thousands of Indiana residents could be considered functionally illiterate and that the price of this problem, all too often, is unemployment and even crime (Bayh, 1990). Recent studies reveal that as many as 45% of federal, state, and local prison inmates have less than an eighth-grade education. Indiana's prison population, between 13,000 and 14,000, has increased 300% since 1983. Sixty percent of these inmates did not graduate from high school, and 45% are not functionally literate at the eighth-grade level (Newman, Lewis, & Beverstock, in preparation).

The Role of Government

Proponents of adult literacy programs assert that it is appropriate for the state to play a role in providing literacy education services in order to develop a citizenry active in the democratic political process. Some contend that literacy advances the welfare of the state as much as that of the individual. Programs that encourage adult literacy cost money, but allowing illiteracy to continue on its present course may be even more costly. There is evidence that resources devoted to helping adults with reading problems ultimately save tax dollars. One of the authors followed the progress of a young Indiana man who, with the aid of literacy tutors, advanced from a first- to a seventh-grade reading level in two years. Indiana taxpayers saved an estimated $30,000 per year in public assistance and taxes paid when the young man found work.

Like the familiar intergenerational cycle of poverty and welfare, there is an intergenerational cycle of illiteracy. Investing in literacy programs for adults now could reduce the cost of fighting illiteracy in the next generation. Parents, especially mothers, who are literate are likely to raise literate children. In fact, research shows that one of the strongest variables affecting student achievement is the mother's educational level. This relationship is so strong that some experts say "funds for compensatory education for children would be better spent if they directly focused on improving the literacy of mothers" (Listening to Mothers' Voices, 1992, p. 1).

Federal Literacy Programs

Federal interest in literacy dates back to the beginning of this century, when literacy programs were used...
first to bring European immigrants into the American cultural mainstream and later to train soldiers to fight in both world wars. In the era immediately following the Soviet Union’s launch of Sputnik, the focus shifted to a functional literacy related to creating and sustaining a technological society. The Economic Opportunity Act of 1964, part of President Johnson’s plan for a Great Society, was the first piece of legislation providing for federal funding for adult literacy education. The Adult Education Act of 1966 established the National Advisory Committee on Adult Basic Education, and in the 1970s The Right to Read—a nationwide 10-year attack on illiteracy—was conceived (Cook, 1977).

Building on the efforts of the National Coalition for Literacy, founded in 1981, the Adult Literacy Initiative of 1983 called for a coalition of public and private agencies to further literacy activities, promote awareness and voluntarism, recruit new service groups, and collaborate with and build upon existing adult literacy efforts. The funding for this initiative, however, was limited.

Federal workforce literacy initiatives also include special adult education demonstration projects and teacher training programs (Adult Education Act, 1966); provisions for education and training programs for certain recipients of federal aid (Food Stamp Act, 1977); programs to prepare disadvantaged and unskilled youth and adults for entry into the labor force (Job Training Partnership Act, 1982); and attention to education and training to reduce the welfare rolls (Welfare Reform Act, 1988). In addition, the U.S. Department of Education’s Office of Private Sector Initiatives has sought to identify ways for the private sector and education to work together, and the Department of Labor has convened the Commission on Achieving Necessary Skills with representatives from government, business, and education (Brannan, 1990).

Addressing the intergenerational aspects of literacy, the U.S. Congress approved the Even Start program in 1988. Funded in 1991 under Chapter 1 of the Education Consolidation and Improvement Act, this program integrates early childhood education, adult literacy training, and parenting education across the country. Even Start seeks to help disadvantaged parents improve their literacy skills by, for example, introducing them to children’s books, suggesting ways they can share the books with their children, and encouraging them to help their children with their schoolwork.

Responding to national concern about education at all levels, in 1990 President Bush and state governors adopted education goals for the United States. Among them was a goal for adult literacy: “By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship” (U.S. Department of Education, 1991).

The National Literacy Act of 1991 established a national institute on adult literacy to “help ensure that all adults have the literacy and basic skills needed to take advantage of better employment opportunities” (Federal Register, 1991, p. 55542). Under this act, the institute will (a) coordinate the adult literacy activities of the U.S. Departments of Labor, Health and Human Services, and Education; (b) expand research on adult learning and literacy; (c) create state literacy resource centers; and (d) provide funds for professional and volunteer training (Long, 1991).

Indiana Literacy Initiatives

Indiana has five state-level agencies contributing to literacy: the Indiana Adult Literacy Coalition (IALC); the Governor’s Voluntary Action Program; the Indiana Department of Education, Division of Adult Education; the Indiana Department of Workforce Development, Office of Workforce Literacy; and the Indiana State Library. These five groups, each with complementary and distinct roles, work with the Department of Employment and Training Services.

The Indiana Adult Literacy Coalition and the Governor’s Voluntary Action Program

Indiana was one of the first states to enact, in 1983, legislation mandating a state coalition to combat illiteracy. In 1986 that organization, the Indiana Adult Literacy Coalition (IALC), was given a 10-year mandate to “develop and implement a state literacy program” (Ind. Code Ann. §20-11-3-1, 1986). The coalition draws on the efforts of literacy advocates from more than two dozen literacy support groups and agencies, including the Indiana Department of Education; community literacy programs, such as those offered in local libraries; and business and labor literacy programs. The three broad goals of the coalition’s 10-year plan are (a) to make literacy instruction available to adults in every Indiana community, (b) to coordinate and improve local literacy instruction efforts, and (c) to advocate the importance of literacy (IALC, 1991).

The most dramatic change since the coalition was formed has been the proliferation of voluntarism. Over 3,000 active volunteers, more than four times the number in 1982, are currently involved in 101 volunteer-staffed literacy programs in the state (L. Warner, Director, Indiana Literacy/Technical Education Resource Center, personal communication, October 1991). Instrumental in this growth has been the Governor’s Voluntary Action Program, which along with the Department of Education’s Div-
mission of Adult Education and the Indiana State Library is one of the three links in the IALC administration. Recognizing that adult functional illiteracy presents the state's single greatest need for volunteers, the Governor's Voluntary Action Program promotes statewide public awareness and participation through publicity, volunteer referrals, and the recognition of new readers, exemplary literacy volunteers, and successful literacy programs (S. Hunt, Director, Governor's Voluntary Action Program, personal communication, January 1993).

The IALC connects library volunteer tutoring programs throughout Indiana. Volunteers receive from 10 to 24 hours of instruction in theory and methods of adult literacy tutoring. Between 1982 and 1988, total enrollments in adult literacy programs in Indiana grew about 41%, to about 39,000 (IALC, 1991). Literacy instruction is now available in 90 of Indiana's 92 counties, and literacy groups around the state have joined together in 38 local coalitions (R. Keith, Hotline Coordinator, Indiana Literacy/Technical Education Resource Center, personal communication, December 1992).

The Indiana Department of Education, Division of Adult Education

The Division of Adult Education at the Indiana Department of Education coordinates adult basic education (ABE) classes that are conducted in conjunction with local schools and school corporations throughout the state. The division has also developed partnerships to improve adult education services to welfare recipients. Community-based locations for ABE classes include jails, businesses, libraries, churches, and workforce development sites. In 1991, 50,449 adults were enrolled in ABE and Adult Secondary Credit Programs, a 9% increase over 1990 (Indiana Department of Education, 1991). In 1991-92, 51,134 adults were enrolled in ABE and Adult Secondary Credit Programs. Their teachers included 162 full-time and 1,026 part-time instructors. Because classes for adults are often held at night and in a variety of community settings, it is difficult to maintain the full-time staff needed to provide effective, sustained literacy programs in Indiana (C. Anderson, Director, Division of Adult Education, Indiana Department of Education, personal communication, November 1992).

The division also administers programs to develop intergenerational literacy. These programs include Learning Choices, a family literacy program for the homeless, and Even Start, the result of partnerships among local adult education providers, early childhood educators, and primary school educators.

The Indiana Department of Workforce Development, Office of Workforce Literacy

In 1990 the Indiana General Assembly created the Office of Workforce Literacy, now a division of the Department of Workforce Development. The office is charged with working with Indiana industry to encourage and support literacy education in the workplace. Its goal is to ensure that all Indiana residents entering the workforce are able to read and write well enough for optimum job performance. To date, the office has implemented a skills enhancement program for Indiana state employees; consulted with 14 major employers around the state to identify job skills, literacy needs, and literacy education providers and to assist them in developing literacy programs; and coordinated two statewide conferences. The resulting programs have varied and have included one-on-one tutoring and classes focusing on the General Equivalency Diploma (GED) and job-specific skills. A voluntary program for improving report writing skills as well as other, more personal literacy goals has been set up for the staff of the Indiana Women's Prison. Currently the office is developing an assessment and evaluation procedure that will relate productivity, rate of absenteeism, and other factors to workforce literacy.

The Indiana State Library

The Indiana State Library supports adult literacy with direct programs and support of local programs. Out of a statewide system of 238 libraries, 139 reported supporting literacy efforts in 1991 by providing materials, meeting spaces for instruction, and space for a local program's materials. Other support has included meeting with local literacy councils and coordinating referrals to several programs. Some libraries also sponsor literacy programs that recruit and train tutors, recruit learners, and match learners to tutors (S. Franklin, Special Services Consultant, Indiana State Library, personal communication, May 1992).

Conclusion and Recommendations

Indiana has made notable strides in adult literacy, and yet literacy programs are still reaching only 6% to 7% of the target population (IALC, 1988). Although some increases are on the horizon for adult literacy as a whole, it is important to recognize that there has never been funding for reaching the larger number needing assistance (C. Anderson, Director, Division of Adult Education, Indiana Department of Education, personal communication, November 1992). A fully developed literacy promotion effort should include strengthened programs for the workplace, prisons, hospitals, libraries, and other institutional settings. Policymakers and program developers should consider the following when developing policies and programs to increase adult literacy in Indiana.
The culture of adulthood and the learner's social milieu and economic circumstances create the framework for designing adult learning programs. While some adults may lack extensive formal education, they have experience that should be tapped in literacy education.

Literacy problems are multi-dimensional, and the literacy needs of adults go beyond reading and writing. Literacy programs should also develop skills in computation, problem solving, technological applications, and democratic citizenship. In addition to appropriately assessing, placing, and instructing students, adult literacy programs should be coordinated with other human service agencies, and program staff should be able to assist students in addressing a range of problems, including such issues as health, employment, and housing.

Because their needs are diverse, functionally illiterate adults require diversity in literacy programming. In multicultural locales, for example, literacy programs should be designed to meet the special needs of non-native speakers of English. The approach to instructional method in literacy programs should be pluralistic. Evaluation and assessment should not be based on single measures.

Postsecondary institutions and the Division of Adult and Continuing Education have critical roles to play in the literacy effort by addressing the special needs of continuing, non-traditional students. Besides basic skills education, programs should include instruction in interpersonal and communications skills and lifelong learning attitudes and strategies.

The problem of functional illiteracy in the workplace cannot be solved by business and industry alone. Business and industry should be given incentives to operate literacy programs, but, more importantly, they should be encouraged to collaborate with schools and government in a unified literacy effort.

Program development should be collaborative. Literacy education providers should participate in the design of evaluation methods, and additional funding should cover the costs of participation. Determining and evaluating what will be learned should be done in collaboration with the adult learner.

The proper balance between voluntarism and professionalism in the literacy teacher corps is a delicate one. Although the number of volunteer instructors in Indiana's literacy programs has grown, full-time teachers prepared to work with adults are also needed. Efforts to professionalize literacy work, however, should not exclude uncertified volunteers.

A superintendent of adult education should be considered as a means of monitoring all adult literacy programs, whether they are in schools, libraries, prisons, or the workplace.

Gains in adult literacy cannot be achieved without the motivation and participation of those for whom the programs are designed. All aspects of literacy policies and programs, including the benefits and difficulties of mandating attendance at literacy classes, should be examined for their effect on students' attitudes.

Indiana has excellent literacy resources and networks, including the Indiana Literacy/Technical Education Resource Center and the Indiana Adult Literacy Coalition (see list p. 6). As the effort to increase adult literacy in the state grows, these resources and networks should be used and expanded to keep literacy educators informed about new and existing programs.

An effective literacy effort in Indiana requires an overall, continuing policy that supports literacy education in diverse contexts. Teaching adults to read, however, will not erase the poverty and discrimination that accompany illiteracy. The newly literate, no matter how functional, will not be able to meet their potential unless the barriers to equality of opportunity are removed. Adult literacy policies and programs can develop best when part of a national and statewide commitment to equity.

References

Bayh, E. (1990, September). Governor's proclamation for Literacy Month. (Available from the Indiana Governor's Office.)


Acknowledgements: The authors wish to thank Robert Arnowe and Janis Block for their assistance with this manuscript.