The phenomenon of adult functional illiteracy in the United States is examined, and strategies are considered for addressing the problem. Reasons for the failure of existing programs (schools, adult education, and volunteer tutoring) to close the literacy gap are explored; among these factors are the relative growth of underserved populations, increased technological demands, and the small proportion of the target population that is currently receiving literacy training. It is argued that stimulation of informal literacy training and spontaneous acquisition of literacy skills form an important, but neglected strategy. One-to-one interactions to help someone accomplish a literacy task afford critical opportunities for informal literacy education. Next, a preliminary theoretical framework for adult literacy development, encompassing both formal training and spontaneous acquisition, is described. Implications of this model for reaching nonparticipants are explored through the concept of situation specificity; this section illustrates general and specific barriers to participation for different age groups, Hispanics, Blacks, and offenders and exoffenders. Finally, an outline of a research agenda suggests ways to enhance outreach efforts in adult literacy. A reference list concludes the document. (SK)
GIVING LITERACY AWAY

An Alternative Strategy for Increasing Adult Literacy Development

By

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This essay, *Giving Literacy Away: An Alternative Strategy for Increasing Adult Literacy Development* is one of four monograph papers commissioned by the National Adult Literacy Project (NALP), a joint project of the Far West Laboratory and the NETWORK, Inc., sponsored by the National Institute of Education. NALP is one component of President Reagan's (1983), Initiative on Adult Literacy. The Initiative was designed to promote collaboration between the public and private sectors in order to offer literacy training more effectively and economically to those who seek and need it. The other monographs in the series are titled: *Promoting Innovation and Controversy in Adult Basic Education: Section 309 of the Adult Education Act; Television Technologies in Combating Illiteracy;* and *The Literacy-Employment Equation, Education for Tomorrow's Jobs: A Policy Options Monograph.*
INTRODUCTION

Adult illiteracy has long been considered a problem in the United States. "Campaigns" to "combat illiteracy" have come and gone and the problem persists. It has recently gained national prominence as a pressing educational issue which has implications for the security and economic well-being of our nation. In September 1983, the then Secretary of Education, T. H. Bell, announced an Adult Literacy Initiative in which he called for a coordinated nation-wide effort to expand the resources available to increase adult literacy levels. The Secretary noted that 23 million Americans were functionally illiterate at that time.

A highly visible component of this effort to date has been an awareness campaign, designed to increase public attention to and understanding of the extent and consequences of illiteracy among American adults. Such efforts are expected to reduce illiteracy by expanding the enrollment of adults in a variety of publicly and privately supported literacy training programs; by increasing the recruitment and training of volunteers to serve in some types of literacy programs; and by increasing the revenues available (from the private and public sectors) to operate the programs.

In the excitement and rush of these well-intentioned efforts to solve what is portrayed as a major educational, social, economic and humanitarian problem in the United States, some important aspects of adult literacy development are often overlooked. These omissions tend to perpetuate public misconceptions about adult illiteracy and to narrow the range of approaches considered by program planners and policy-makers.
This essay considers a few of these misconceptions and omissions and suggests some promising new directions for the development of adult literacy programs.

The approach advocated here is termed "giving literacy away," which is meant to suggest the delivery of literacy training to adults in the context of their own settings, peer networks and value systems rather than in those of the service provider. When literacy training is "given away", learners need not leave the comfort and safety of their surroundings for a distant or uncomfortable location where adult education classes may be offered (such as in a school building where many individual adults previously experienced failure); learners need not identify or expose themselves as being illiterate, thereby stigmatizing themselves with the often inaccurate, stereotyped characteristics others ascribe to that status; and learners need not feel (as they often do) that becoming more literate means abandoning friends, families and peer values to join a larger, more impersonal world dominated by alien and sometimes hostile institutions and values.

Development and provision of training that is embedded in the fabric of adults' ongoing lives can greatly expand both the number of students and tutors involved in training across the country, many of whom would never participate in programs that do not "give literacy away" in this manner. Drawing on a growing research base, some suggestions will be offered about how such programs can be designed and implemented, and a targeted research and development agenda will be proposed that can shape programs to "give literacy away."

It must be emphasized that what is proposed here is not intended as a replacement for part of the diverse array of existing programs in
operation and serving millions of adults. For many adults seeking better reading and writing skills, of course, existing types of programs are both appropriate and effective. Increased resources and public awareness will assist these programs to expand their outreach and service. What is proposed here, however, is a promising complementary programmatic approach, one designed to reach and train many millions of adults who will likely never be served by existing programs.

Some programs, of course, may already be in the process of giving literacy away. Programs run by community-based organizations, in particular, often include a component of basic skills training as part of broader goals for community development. Hopefully some of the ideas presented here will facilitate the process of instructional development for such programs, as well as helping other types of programs begin the process of giving literacy away.
POPULAR CONCEPTIONS AND MISCONCEPTIONS OF ADULT ILLITERACY

Extent and Consequences of Illiteracy

Although attention to adult illiteracy has been steadily increasing in the last couple years, the nature of the problem is still poorly understood. In part, the long-standing difficulty of addressing this problem has stemmed from the need to define it. Definitions of functional literacy abound. The figure cited by Secretary Bell in announcing the Adult Literacy Initiative was derived from Census statistics by defining functional literacy as completion of an eighth grade education (U.S. Census Bureau, 1981). Grade level equivalency was generally accepted as a criterion for many years. During the early 1970s it came under scrutiny and was criticized for not being a valid measure of ability to perform diverse literacy tasks. Since that time, task performance approaches to assessment have been developed, perhaps the most widely known being the Adult Performance Level (APL) study (Northcutt, 1975), which designed a series of simulated real-world items to test functional competency. Through use of its measures, the APL study estimated that over 50 million adults in this country were unable to function adequately when dealing with literacy-related matters. By extrapolating those decade old estimates to the present time, figures have been cited as high as 72 million functional illiterates and marginally functional adults. Although, the APL Project has been criticized for methodological errors and misinterpretation of its results (Griffith and Cervero, 1977), it has served as a model for attempts to define functional literacy in terms of particular skills and competencies.
Popular print and broadcast media have recently undertaken a high intensity effort to increase awareness of and attention to the problems of adult illiteracy in the United States. We read and hear that tens of millions of adult are "functionally illiterate", unable to understand simple labels, fill out forms, read employment ads or read to their children. Reports of there being 23 - 27 million functionally illiterate adults are heard nearly everyday, usually followed by an authoritative sounding note that an additional 42 - 45 million have only "marginal" proficiency. Hundreds of billions of dollars are reportedly lost each year in unrealized earnings because of illiteracy in the workforce. The ranks of the indigent, of the population dependent on welfare, of the criminal offenders and of the unemployed are, according to popular arguments, swelled by illiteracy. The stigmatization and degradation suffered by those unable to read in a society overwhelmingly dominated by literate institutions is another commonly cited consequence of illiteracy. Most of these conclusions have been based on the overrepresentation of undereducated adults among the poor and unemployed in U.S. Census and other survey data, in which educational attainment was used as a proxy for functional literacy.

But such conclusions may not be so straightforward. A wide range of definitions and measurement methods have been used to assess the extent of adult illiteracy in the United States (Bormuth, 1973-74; Kirsch and Guthrie, 1977-78; Reder, Walton and Green, 1979). Estimates vary between less than 1 percent to as much as 50 percent depending on the criteria used. The larger of these estimates tend to be the ones usually put before the public, not because their validity in particular has been scientifically established, but because they help call attention to the
issues. No one really knows how many "illiterate" adults there are, because no consensual definition has been established, and pertinent data are very hard to come by (Kirsch and Guthrie, 1977-78; Hunter with Harman, 1979). Even if a standard definition were adopted and associated statistically with other socioeconomic indicators, the relationships would be difficult to interpret. Serious doubts must be raised about assumptions that increased literacy will end poverty, unemployment, crime and other social ills correlated with undereducation and illiteracy. Programs should not be developed on the assumption that such changes will automatically come about for participants or for the society at large.

Such concerns about definitions and measurement methodology are often dismissed by literacy practitioners as being impractical and academic: concerted efforts to tackle the problem must not wait for further research, definitions and assessments. The point of this essay is not to dispute a particular number or definition (since we believe the problem of adult illiteracy needs much more attention regardless of whether the "number" is 6 million or 60 million), but to challenge the stereotyped, inaccurate portrait of the "illiterate" that so often accompanies whatever number is reported. As Sticht (1985) and Harman (1985a) have noted in reviewing Kozol's Illiterate America (1985) the very real and complex problems faced by adults with poor literacy skills are too often stereotyped, trivialized and distorted by well-intentioned but misleading attempts to publicize the issues and wage a "campaign" against illiteracy. The misconceptions at the root of these inaccurate stereotypes have very serious programmatic implications. No matter how much publicity is generated, no matter how much funding is raised for program operations, successful efforts to address the problem will depend
on a clear understanding of what the problem is and a recognition of its complexities.

Even though there is no denying the positive value of literacy as a tool in this society, care must be taken to avoid the negative assumptions about illiterates which usually accompany the high positive high values this society attaches to literacy. All too often illiteracy is referred to as a social "ill," something to be "combatted," "eradicated," "wiped out" -- as one would talk about a contagious disease. Illiterates are considered to be a "drag" on society. Nationally televised or broadcast programs about illiteracy often present uncensored statements such as "Illiterates breed illiterates" or "What can be done to make these people settle down and learn?" with apparently little concern about the impact such negativism will have on illiterates in the audience who might have been considering "coming out of the closet" (another negative cliche) to seek needed training.

Characteristics of Illiterates

However the population of functionally illiterate adults may be defined, it is not a homogeneous group of people in whose behalf a monolithic literacy "campaign" can be effectively waged. They have a diverse set of needs, interests and concerns, and varying proficiencies at dealing with the written materials they encounter in everyday life. Stereotyped ideas about "functionally illiterate" adults, such as their being unable to read at all, or not having useful skills and being unable to cope in daily life (other than being able to "hide" their illiteracy from others), or being ignorant about most matters, or unable to participate in most of society's activities are examples of unwarranted
inferences and assumptions that have little empirical validity.

Observers who have spent a great deal of time with undereducated adults in a range of settings in the United States have described a far more complex pattern (Fingeret, 1983; Heath, 1983; Reder and Green, 1983, 1985; Scribner and Jacobs, 1984; Sticht, 1985). They report that undereducated adults, most of whom presumably would be included in conventionally described populations of "functionally illiterate" adults, often have well developed skills of other kinds and a wide variety of strategies for dealing with written materials, some of which employ their own reading skills, others which employ the literacy skills of friends, neighbors or family members.

As Fingeret (1983) has eloquently pointed out, illiterates are often fully contributing, integral members of their respective communities. They participate in elaborate social networks in which they receive the help they need to handle written materials in exchange for other types of expertise they possess (such as mechanical experience, counseling, child care, etc.). Considering them to be powerless, unskilled, noncontributing members of society does them a crippling disservice and may complicate efforts designed to provide literacy training for them.

Far from being dysfunctional in their own environments, many cope quite handily, and are reluctant to trade the comfort of their environments, systems of knowledge and values (rooted more in day-to-day experience and what Fingeret terms "common sense" than in written materials) for the environment, knowledge base and values of "educated fools", an exchange that many perceive adult education programs to demand. Although many individuals described as "functionally illiterate" have relatively poor reading and writing skills, the majority are not
illiterate: they can and often do read written materials of interest to them, although often with some difficulty, and "can use their ... literacy skills to gain new knowledge by reading, writing, and interacting with knowledgeable teachers and peers" (Sticht, 1985). Often these individuals interact regularly with friends and neighbors who have better literacy skills, jointly completing a task such as filling out a form or writing a letter. Such routine collaboration among peers on tasks involving reading and writing is ubiquitous in social networks of undereducated adults (Reder and Green, 1983, 1985; Heath, 1983, Fingeret, 1983). The essentially collaborative nature of literacy in these groups is a critical phenomenon with potentially profound implications for adult literacy development. Unfortunately it has not been systematically considered in program development. This topic will be examined in some detail below.

Literacy Training

Reducing adult illiteracy has long been seen as the responsibility of adult education programs (Cook, 1977). Basic skills training is presently offered by a diverse array of public and private organizations, including Adult Basic Education programs, the armed forces, private employers, job training programs, community-based organizations, volunteer tutoring programs, correctional institutions, community colleges, churches, and so on. Reviews of this complex network of service provision are available in Cook (1977), Hunter with Harman (1979), McCune and Alamprese (1985), and Harman (1985b), among others.

The general conclusion one reaches from these reviews is that relatively little information is available about the extent of literacy
training provided and the impact such training has on adult literacy
development. The most systematic data pertain to the training funded
under the Adult Education Act (Delker, 1984). Basic skills, ESL and
high-school equivalency programs are included in this category.

Available information indicates that only a small proportion of the
population most in need of literacy training is actually being served.
The National Advisory Council on Adult Education (NACAE) in its 1977
Annual Report estimated only 4.25 percent of U.S. citizens with less than
a high school diploma were involved in adult education programs (Jones,
1981). Moreover, participant attrition rates in adult education programs
range as high as one third of those those enrolling (Coles, 1976). While
the percent of individuals being served remains small, the number of
individuals in need of training seems to increase.

Other studies also support the conclusion that a substantial gap
continues between the population most in need and those receiving
training. Adult Basic Education (ABE) programs were found to be reaching
a small number of their target population. In 50 states and the District
of Columbia, only five states' ABE programs served more than 9 percent of
their ABE target population (Jones, 1981). A study in a city with a
population of 750,000 found only 3 percent of the functionally illiterate
adults were participating in adult education (Huantes, cited in Kozol,
1985). Findings are similar for most segments of the population in need
of adult education. According to a 1978 survey, the elderly, Blacks,
those not completing high school and those with incomes under $10,000
were all seriously underserved (Cross, 1981). Examination of specific
population segments have found very low participation rates in adult
education. Inquiries based on income, racial and ethnic minority status,
education and age all yield similar findings that those segments of the adult population most in need are underrepresented as program participants (Hunter with Harman, 1979):

- Participation rates for families with median or lower incomes ranged from 6 to 11 percent of the target population.

- Individuals with less than high school education comprise 40 percent of the target population for adult education, yet only 13 percent of this segment participate in adult education programs.

- Between 1969 and 1975, Whites participating in adult education increased three times as fast as their proportional population increased. Black participation in adult education in proportion to their numbers fell during the same period. (Black participation rates increased only one-third of their rate of growth in the overall U.S. population.)

Self-reported participation figures (for May 1980) in adult education programs exhibit the same pattern as these earlier findings (U.S. Bureau of Census, 1981):

- Only 5 percent of participants were 55 years old and over.

- Only 8 percent of participants had less than four years of high school education.

- Only 15 percent of participants had family incomes of less than $10,000.

Although volunteer tutoring programs and literacy programs operated by community-based organizations prioritize serving adults at the lowest reading levels, what little information is available on the extent of their service does not ameliorate concerns that those in need are being adequately served. Volunteer tutoring programs serve less than 100,000 persons a year (Kangisser, 1985). When the actual number of hours of instruction are examined, the picture looks even bleaker (Pasch, 1985). Although community-based organizations claim to provide literacy training to as many as 600 - 700,000 adults, per year (Association for Community Based Education, 1983), little information is available about the nature of their clientele or the duration of literacy training provided.
The picture that seems to emerge here is that those most in need of literacy training are severely underserved by the array of existing programs. Certainly the national efforts underway to expand volunteer tutoring will help, but even doubling or tripling the number presently served (an ambitious goal) would still represent a proverbial drop in the bucket, encompassing a small fraction of even the new additions each year to the pool of functionally illiterate adults. Efforts to allocate additional public and private resources for funding other types of existing programs certainly will be helpful as well. But many existing programs will likely encounter limited success in reaching, enrolling and retaining vastly increased numbers of low-level students long enough to make significant headway. As Mezirow, Darkenwald and Knox (1975) noted, many ABE programs tend to run "creaming operations", primarily attracting those sharing the values of the program's middle-class teachers and administrators: adults having different values or lifestyles tend not to participate in such programs.

There are, of course, many reasons for their low rates of participation. Books written about the adult learner (e.g., Cross, 1981; Darkenwald and Merriam, 1982) and about teaching the adult illiterate (e.g., Jones, 1981) always include a discussion of factors influencing participation in training programs. Barriers to program participation are presented in a number of different ways. Cross categorizes them as (1) situational, (2) institutional, and (3) dispositional (pp. 97-108). Darkenwald and Merriam list four categories: (1) situational, (2) institutional, (3) informational (which Cross includes in her institutional category), and (4) psychosocial (pp. 136-37).

From our experience and discussions with others involved in the provision of literacy training to adults, reasons often heard for not
being able to attend include lack of transportation, money, child care, and time (or classes held at the wrong time). Adults with low level literacy skills are often found among the ranks of the poor, the unemployed or underemployed. They seldom have extra money to buy a textbook, pay a babysitter, take a bus or buy gas to get across town to a class.

Lack of information about programs is another commonly cited factor keeping adults from participating in existing programs (Darkenwald and Merriam's "informational" barrier). Adults with limited literacy skills may rely primarily on other means of communication for information -- television and radio, of course, but also to a large extent, word of mouth. Recent efforts at local and national levels to increase public awareness of literacy training can be expected to help.

Another common reason for not attending classes is lack of congruence between program goals and student interests. The purpose of most formally organized classes for undereducated adults is to prepare them to pass the GED exam. Many functionally illiterate adults are not interested in achieving that goal. Perhaps more than any other issue in the provision of literacy training to adults, this discrepancy exemplifies the need for a situation-specific approach. The positive societal values traditionally attached to literacy and education in general may not in themselves provide an appropriate or adequate basis for planning and offering adult basic education classes. As Heath concludes following her study of an all-Black working-class community in the southeastern United States (1980, p. 132):

...for a large percentage of the population, learning and sustaining reading and writing skills are not motivated primarily by a faith in their academic utility. For many families and communities, the major benefits of reading and
writing may not include such traditionally assigned rewards as social mobility, job preparation, intellectual creativity, critical reasoning, and public information access. In short, literacy has different meanings for members of different groups, with a variety of acquisition modes, functions, and uses; these differences have yet to be taken into account by policymakers.

Among educationally disadvantaged adults, different aspirations exist along with different definitions of success, and these need to be considered when planning ways to help individuals meet the needs they have for reading and writing.

Fingeret (1985) divides programs into "individual-oriented" and "community-oriented" types. The "community-oriented" programs she identifies are distinguished by their orientation to the specific needs and milieu of particular ethnic and cultural groups and to self-help groups formed around such issues as health care or housing. "Community-oriented" literacy training is provided as part of a broader process of social change and problem-solving. The pedagogical focus is on collective development and action rather than on primarily individual advancement. They stress a mix of program activities rather than literacy training alone as the means for participants to become functionally literate and productive members of society.
THE COLLABORATIVE NATURE OF LITERACY:
A POTENTIAL RESOURCE FOR ADULT LITERACY DEVELOPMENT

This section examines two often overlooked aspects of adult literacy: natural helping networks and adults' spontaneous acquisition of literacy. It is suggested that these phenomena may be related; through interaction and collaboration with their "literacy helpers," many adults incidentally acquire knowledge and skills related to the performance of specific literacy tasks. The following section examines a promising strategy for drawing on these informal networks and acquisition processes to stimulate adult literacy development: recruiting and training literacy helpers as tutors for the individuals they help (but may not presently tutor). Some ways that this strategy can help existing programs to "give literacy away" will be discussed.

Literacy Helping Networks

In addition to the more formally organized resources for literacy training, informal resources exist which help adults improve their literacy skills and knowledge and cope with the written materials which confront them in their daily lives. These informal resources take many different forms; most often they are one-to-one interactions between the person needing assistance with a literacy task and a helper, but they can also be small group interactions. These interactions are distinguished from formal training because they do not rely on formally organized methods or materials and usually arise in spontaneous response to an individual need or situation. They come into being for many different reasons; however, to facilitate discussion here two general categories of purpose can be identified -- (1) teaching, and (2) simply helping. (Of
course, these are not mutually exclusive categories. Considerable overlap can exist, and the initial purpose may change during the course of the interaction.) In this section some examples are briefly reviewed of the informal literacy training that takes place in interactions involving these different purposes.

When the purpose of the interaction is to teach, it may simply be to teach reading and writing, or it may be to teach the skills and knowledge necessary to accomplish a specific task. For example, a neighbor of a local church member may be asked to help an individual deal with a form that has arrived in the mail. The neighbor may simply show the person how to handle that form or, realizing that the person has limited literacy skills, the neighbor may offer to teach him/her to read. This volunteer "teacher" may have no special training to structure the teaching process and may not have specific teaching materials either. Particularly motivated individuals may search for appropriate materials or assistance and in their search may become involved in a formally organized volunteer tutor effort. Or they may simply find some useful materials and continue their own informal tutoring. A church member may use simplified religious materials with the added purpose of recruiting the person being tutored for the church.

The instances of teaching to accomplish a specific literacy task are far more numerous than those involving the informal teaching of literacy per se. In our research on adult functional literacy, (Reder and Green, 1983, 1985), we observed numerous examples of informal tutoring interactions in which one individual teaches another individual or individuals how to deal with a specific literacy task. In an Eskimo fishing village in Alaska, certain individuals were known to be experts
in dealing with specific written forms and they were frequently seen informally instructing others about filling out those forms. The postmistress often guided individuals through the steps in filling out a money order; the city office clerk instructed individuals in filling out welfare reports; a local man known for his knowledge of income tax forms showed his relatives and friends how to fill out their returns.

Among Hmong immigrants we studied informal literacy teaching among adults is a common occurrence. Individuals with experience dealing with particular written genres (forms, applications, etc.) are constantly helping others deal with those materials. Individuals teach others how to fill out monthly public assistance reports (reporting income or change in size of family or address); how to take the driver's license examination; how to fill out a job application, a money order or a change of address card; how to apply for a hunting license; how to read a phone or electricity bill, a WIC voucher or a grocery receipt.

Hispanic communities -- particularly those in the migrant stream -- provide similar examples of informal literacy training towards a specific goal. In a Hispanic community in our study, an Anglo woman with a particular interest in the welfare of her Hispanic neighbors informally tutors individuals and small groups in the skills necessary to read and pass the driver's license exam in English.

Interactions with the purpose of simply helping someone with a literacy task abound. Daily life in nearly every community in the United States provides multiple opportunities for using literacy skills and knowledge; individuals without the appropriate skills or knowledge usually find ways to cope, most commonly by getting help. All of us can think of examples of using such informal helping networks in our own
personal lives. Such networks may exist within one’s nuclear family (asking a parent or spouse for help to understand the language on the federal income tax form, for example) or within the extended family (checking with a cousin who is a lawyer), or the networks may be established at the neighborhood level or even develop from an institutional contact. Hard data on the extent of such helping networks unfortunately is extremely limited.

Research on adult literacy is just beginning to examine these informal literacy assistance networks. Fingeret (1983) conducted interviews and participant-observation fieldwork with illiterate adults (both black and white) in a northeastern urban setting. There she found an elaborate social network based on the exchange of skills and knowledge among readers and nonreaders. Getting help to read mail or contracts (as in the case of an illiterate businessman) or write letters or fill out forms is an accepted everyday occurrence. Specific individuals are identified for their skills with certain items and/or the degree of confidence or trust one has established with them, and helping networks evolve which take on considerable social significance in the lives of the participants, nonreader and reader alike.

Another example of such natural helping networks is described in a recent issue of *Smithsonian* (Margolis, 1983). The article, "In Rural America the Post Office Remains a Mecca," cites a rural resident’s way of dealing with literacy: "Most of us cannot read or write. The Post Lady does all the reading and writing (for us)...We trust her to take care of our business."

The distinction between teaching to accomplish a specific task and simply helping someone with a literacy task is somewhat arbitrary in
practice. Indeed, there often is only a fine line separating the two. But the distinction is made here to emphasize that interactions or activities that appear to be simply one person helping another with a literacy task should be considered as potential opportunities and contexts for informal literacy training, even though the initial purpose may not be to teach the individual how to perform the task alone, but simply to assist him or her. Even if the individual requesting the help does not have the skills to actually decode or encode the materials in question and does not learn those skills in this particular interaction, learning about other facets of literacy may take place -- knowledge about the specific uses of literacy, termed "functional knowledge" of literacy by Reder and Green (1985).

Adults' Spontaneous Acquisition of Literacy

Adults' learning of literacy skills has long been identified with adult education programs (Cook, 1977). Although surveys of alternative forms of adult literacy training have been compiled (e.g., Carroll and Chall, 1975; Griffith and Hayes, 1970; Hunter with Harman, 1979; Fingarette, 1985; Harman, 1985), relatively little information or research is available on adults' acquisition of literacy outside of formal training programs. This is somewhat surprising, since a growing body of research on children's literacy development increasingly identifies the important role of extra-school factors (Anderson, Teale, and Estrada, 1980; Scollon and Scollon, 1981; Heath, 1983; Teale, 1984). Although numerous studies of adult uses of reading and writing outside of formal educational contexts have been conducted (Goody, 1968; Guthrie and Kirsch, 1984; Heath, 1982; Reder and Green, 1983; Scribner and Cole,
1981; Sharon, 1973; Sticht, 1973-74; Szwed, 1981), there has been little study of individual adult literacy development outside of formal training programs. There is much anecdotal evidence, of course, indicating that many adults do develop literacy skills throughout their lives, in response to environmental changes, technological developments, and so forth.

Some empirical work has been done recently. The motives and methods used by individuals to learn literacy skills in a self-directed manner as adults have been documented through retrospective interviews. (See Scribner and Cole's (1981) work with Vai literacy in West Africa.) Reder, Greer, and Sweeney's work (1983) with Hmong immigrants in Oregon and California followed a cohort of families closely as they adjusted to life in a new, highly literate environment and developed literacy skills, many without benefit of formal instruction. The historical and ontogenetic primacy of speech over writing, coupled with the facts of universal oracy and non-universal literacy, once prompted scholars to view the acquisition of speech as "natural," but the acquisition of literacy as not "natural" (and hence in need of formal instruction). Recent ethnographic studies of oral and written language patterns in diverse communities, however, have demonstrated the ineptness of such a simple dichotomy and the "natural" way in which many literacy skills are socialized (Heath, 1982; Scollon and Scollon, 1979).

One well-known historical example of spontaneous literacy development followed Sequoyah's introduction of a syllabic writing system for Cherokee in 1826. Within a year, over half of all Cherokee adults were able to read and write (Walker, 1981). Among refugees from Southeast Asia created self- and group-study programs for English language and
literacy while still in refugee camps in Thailand. In the United States, many continue individual and group study, led by more fluent community members or American friends, often neighbors or local church members whose help they have solicited (Reder, 1982). Hispanics, too, have been observed to meet for group English study for specific literacy tasks (for example, to study for the written driver's license exam).

None of this should be especially surprising if the research on children's acquisition of literacy is examined. Although many children learn to read in school, others initiate their literacy development outside of school (Anderson, Teale and Estrada, 1980; Durkin, 1966; Sulzby, 1983; Teale, 1984). There is thus good reason to suppose that many adults may also learn to read (with more skill) without formal instruction.

Reder and Green (1985) argue that illiterate adults' interactions with their literacy "helpers" is an important context for their literacy development. Just as the collaborative literacy task of parent-child "storytime" reading is a major determinant of children's acquisition of story reading and comprehension abilities (Sulzby, 1983; Teale, 1984), it might be expected that an adult's engagement in a recurrent, collaborative literacy task might also stimulate development of literacy skills and knowledge related to that task. Developmental psychologists such as Sulzby and Teale who have examined the social dynamics of parent-child "storytime" have tended to argue that what the child learns develops according to what Vygotsky (1978) termed a transition from interpsychological functioning (the parent and child jointly construct the story) to intrapsychological functioning (the child is able to construct/comprehend the story individually). Teale (in press) elaborates on the significance of what would here be termed a
collaborative literacy act for the child's acquisition:

Children almost never encounter simply the text in a storybook reading situation. Instead the text is mediated by the adult who is responding to the child. Thus, in order to understand the process of learning to comprehend a story, we must understand the operation of language and social interactional factors that accompany the text itself in storybook time. When we examine storybook episodes, we can see that the basis for the child's learning how to comprehend stories is created in the joint interaction between adult and child... We learn how to comprehend written stories as a result of our participation in the sociocultural event of reading stories.

The idea that adults, too, may develop literacy skills from interactions with their natural "helpers" can be seen as a generalization of this account of parent-child "storytime." There are certainly many differences between the parent-child relationship and that of peers functioning in a helping relationship. But some of the collaborative literacy tasks described by Reder and Green (1983, 1985) and by Fingeret (1983), Heath (1983) and others share many properties with descriptions of storytime episodes. Those helping relationships in which literacy task performance is jointly constructed and accomplished and in which sufficient rapport exists among collaborators should well be expected to stimulate adult literacy development.
To increase adult literacy, not only must the quality and capacity of formal adult literacy training programs be increased, but also ways of stimulating adults' informal acquisition and use of literacy skills. Once adults' literacy development is considered as a possible outcome of informal acquisition as well as of formal instruction, additional research issues and development needs start coming to mind. From what types of activities and social contexts do adults learn literacy skills? Are these informal learning environments counterparts of formal literacy training programs, replete with as yet untapped capacity for literacy training if suitable technical assistance were available? To what extent could informal literacy training be "embedded within the logic of everyday life," borrowing the terminology of Szwed (1981) in his clarion call for seeing many literacy practices as means towards larger social ends.

A diagram may help to lay out the possibilities here. The figure on the following page is not intended to be a complete model of either individual or societal literacy development. The central point illustrated in the diagram is that adult literacy development may result from either (or both) formal training and learning or from the informal acquisition which accompanies participation in literacy helping networks or other so-called "coping" processes.

The leftmost and rightmost boxes in the diagram -- the context in which given literacy activities take place -- represent the same processes at different points in time; one precedes the literacy development in question, the other follows it. The identification of
FIGURE 1
PATHS TO ADULT LITERACY DEVELOPMENT

Awareness of Training Programs → Desire for Literacy Training

(CONTEXT) LITERACY PRACTICES

Coping Processes

LITERACY TRAINING PROGRAM → FORMAL LITERACY LEARNING

LITERACY HELPING NETWORKS

INFORMAL LITERACY ACQUISITION → LITERACY DEVELOPMENT

(APLICATION) LITERACY PRACTICES
what we have been calling "literacy helping networks" as a specific context for informal literacy acquisition represents the working hypothesis discussed above. The work of Philips (1972, 1982) with Native Americans in the Pacific Northwest, of Heath (1982, 1983) with blue collar White and Black communities in the Southeast, our own with Eskimo fishermen in southern Alaska (Reder & Green, 1983) and with Hmong immigrants on the West Coast (Reder, Green & Sweeney, 1983), and of Scollon and Scollon (1981) with Athabascans in Alaska, to name but a few examples, all illustrate the centrality of participant group structures for literacy development, at least in its sociocultural aspects. Whether the structure and activity of the "literacy helping network" is decisive for the course of an individual adult's literacy acquisition remains to be demonstrated.

The simplicity of this diagram must not be misconstrued to suggest that all literacy practices develop through one or the other particular pathway. In general, individuals may develop some literacy skills through formal training, others informally. The arrows leading from "awareness," "desire" and "coping" into the diagram represent some of the major influences believed to affect the individual adult's participation in training programs or helping networks. These are, at the same time, possible leverage points for enhancing adult literacy development. The low rates of program participation among the target population suggest that illiterates' awareness of training program alternatives and/or their desire to avail themselves of literacy training opportunities may be generally low. Research is needed to determine the levels of awareness of and interest in adult literacy training and what could be done to raise the levels. Both internal barriers (i.e., program characteristics) and external barriers to participation will need to be examined carefully.
At the same time, there are good reasons to anticipate that many illiterates will never find participation in formal training programs an attractive alternative. Many go to considerable trouble to cover up their low literacy status, many are involved in helping networks or find other ways to accomplish literacy tasks without the requisite skills; still others, for a variety of reasons, do not experience the social context of classroom-like instruction as an environment from which to learn useful skills. Although further research is clearly needed to understand these coping and participation issues better, the conclusion that adult literacy training in the U.S. cannot meet the needs of the target population through expanding the capacity of formal programs alone seems inescapable. Enhancing the extent of adults' informal literacy acquisition is a strategy which must be simultaneously explored.

One way of accomplishing this is through use of natural helping networks for literacy. Informal literacy helpers constitute a vast pool of potential literacy tutors. With orientation and training, they can learn ways to convert the help they give into teaching. Established literacy training providers and community-based organizations interested in addressing the illiteracy problems of their constituents can expand their outreach and broaden the impact of their efforts considerably if they tap into this natural resource.

One way to do this is to recruit literacy helpers to be tutors, thereby gaining greater access to the hard-to-reach, and provide relevant literacy training based on first-hand knowledge of individuals' needs and interests. This outreach strategy may have a number of different outcomes. At the least, it is a way to awaken community members to their potential for doing more than just helping someone when he or she needs
to read or write something. Most helpers do not see themselves as being able to tutor or teach about literacy; they do not realize that their activities can form the basis for tutoring. Recruitment efforts and an orientation workshop, described in a guide by Green, Reder and Conklin (1985), can raise their awareness of what they are already doing and what they have the potential to do.

Not all literacy helpers will want to become tutors, of course. Of those who express interest in learning more about tutoring, some may simply prefer to learn enough to be better helpers. Others may start out gradually, teaching their friend or neighbor to deal with one particular use of literacy -- reading the phone bill, for example, or the sports score boxes, or the TV schedule. Once that is accomplished they may become more interested in taking it a step further; perhaps the illiterate partner in this helping relationship asks for help with a different literacy task. Eventually, the heretofore illiterate adult may feel ready to enroll in an adult education class. Or, in another scenario, the two partners, helper and illiterate, may decide to jump right into a full literacy training tutorial program, in which the purpose is to teach and learn the basic skills of reading and writing well enough to be able to apply them to a wide variety of daily life literacy tasks.

Green, Reder and Conklin (1985) discuss this outreach strategy in some detail, suggesting it as a means of expanding the outreach of existing programs, recruiting and training helpers to tutor the individuals they are already helping with reading and writing tasks. They identify a number of critical advantages that recruiting helpers for existing "in-home" tutoring programs has over the other methods of recruiting tutors:
Tutoring will occur in a natural learning context (the helper already assists the learner with literacy tasks);

- No need for student recruiting (the helper already has a "student");
- No more required tutor-tutee matching;
- Trust already established between tutor and tutee;
- Tutee's felt needs already identified and addressed by tutor;
- Mutual respect and reciprocity already exists between tutor and tutee; and
- Logistical barriers automatically resolved -- tutor/helper already meets regularly with tutee.

Green et al. (1985) discuss special techniques for existing volunteer programs to recruit helpers. Once recruited, they can be trained as tutors in their programs generally are. For the reasons discussed, improved outreach, recruitment and retention of tutors and students can be expected from the incorporation of this strategy into existing operations, even if other aspects of the program are not modified. Some volunteer and community-based organizations, however, may wish to take matters one step further and incorporate features of natural helping networks and spontaneous literacy acquisition into developing their own curricula. There are several promising routes such efforts may follow.

Being familiar with the written materials commonly available in a community and the functions of those materials in daily life there has been shown to be a powerful method of teaching writing to "lower track" students within a school setting. Heath (1981, pp. 39-43) and her team of researchers used ethnographic methods to identify uses of literacy within the social networks of both Black and White junior and senior high school boys with third to fifth grade reading abilities in a southeastern mill town. Consequently, writing instruction began with bulletin board messages and advertisements and expanded to include discussions of
students' perceptions about reading and writing problems in their environment outside of school (at home and in the community). Eventually students were analyzing and rewriting social service memos, housing regulations, warranties and other legal documents to clarify their meaning. The prospects of these hard-to-reach students learning to write had mushroomed.

These ideas may be applied in other settings with adults. Embedding instructional materials and activities in natural contexts is an effective technique. Approaching illiterate adults through a subject or activity with which they are already familiar and in which they have some interest is usually the most valid and workable way to begin the process of helping someone improve his or her literacy skills. For example, one educator suggests starting with receiving and sending personal messages. In a rural Black community a successful approach to teaching illiterates basic reading skills was based on putting materials (pictures of objects and their written names) on playing cards, which individuals commonly carry around and use in public within that community. By utilizing these socially acceptable materials (which do not outwardly mark individuals as illiterate), interest in learning to read was quickly elevated.

Examples can be easily multiplied. Deciphering the sports box scores in the newspaper might be an activity a young dropout would zero in on. An older adult might prefer working with Bible materials. A Hispanic woman who might never attend a literacy class might want help with grocery shopping ads or notes and memos sent home from school with her children. The list is endless; the concept is to deal with what is important to each individual -- not by teaching literacy per se, but by helping build skills in the context of meaningful activities.
One means for helpers to embed pedagogical techniques within the context of the literacy assistance they routinely provide is to introduce the "scaffolding" that characterizes effective teaching relationships. As the term "scaffolding" (Wood, Bruner and Ross, 1976) suggests, this is a means of providing a learner with the necessary support for constructing and performing the task jointly with the teacher. Scaffolding depends both on the social relations between teacher and learner as well as on the task content at hand. When effective scaffolding is present, there is a balance between observation on the part of the learner (while the teacher performs the task) and attempts by the learner to perform the task under the guidance of the teacher. This balance is mutually negotiated, and each party has rights to redefine the task and their roles in its joint accomplishment. Erickson (1984) points out how different such social contexts are from those of the classroom.

Our point here is that the trust and rapport that exist in natural literacy helping networks may often be appropriate and effective contexts for such scaffolding to be introduced to support instructional outcomes with adults. Certainly some helpers may provide such scaffolding as a matter of course in their interactions with those they assist, just as parents do so naturally in helping their children. Other helpers may be able to introduce such techniques into their patterns of assistance, given some initial orientation to and modeling of the techniques. Demonstration films of such teaching would go a long way towards assisting helpers to give literacy away.

These kinds of meaningful activities should take place in familiar, comfortable, nontthreatening locations -- not in institutional settings. The existence of helping networks presents a ready-made entree into such
contexts. One-to-one learning with the "helper," a familiar adult who is already part of the learner's environment, is more likely to contribute to improved literacy for many adults than any formal program. If the helper is also of the same background as the learner, the likelihood of success is even greater. The effectiveness of providing assistance based on the immediate interest or need of the learner makes tapping into natural literacy helping networks a perfect fit -- using the subject of the most recent (or common) request for help as the vehicle for literacy instruction.
The above discussion suggests several foci for an R&D strategy to enhance adults' spontaneous literacy acquisition and program participation:

- **Coping processes:**
  Among the many means illiterates have for coping with the demands of a literate society are engagement in helping networks. Some illiterates, particularly poor and elderly individuals, may be socially isolated from such networks; outreach efforts may draw them into helping networks which would foster acquisition as well as providing needed assistance.

- **Literacy helping networks:**
  These are critical contexts for the use and sharing of functional literacy skills, but they have yet to be explored as contexts for informal acquisition. Research reviewed above suggests that they have several advantages as learning contexts. Nonliterate are already engaged in the setting with the helper(s) and a particular literacy task, and hence the functional knowledge and social values already exist to support acquisition of the technical aspects of the literacy task.

- **Linkage between literacy helping networks and training programs:**
  The dashed line leading from the helping network to the training program in Figure 1 is meant to suggest the interesting possibility that helping networks, in cases where appropriate, could facilitate individuals' awareness of interest in program participation, as well as being a source of information about how program and instructional design could be more responsive to their needs.

- **Determinants of program participation:**
  There are widely varying accounts of the factors underlying adults' participation and non-participation in literacy training programs. Some accounts emphasize internal factors (i.e., program characteristics), whereas other accounts emphasize external factors, including family problems, lack of time, desire not to expose one's illiteracy status, as well as many of the situation-specific barriers described previously. But the relative importance of internal vs. external determinants of program participation needs to be more thoroughly researched. Service providers report that large numbers of adults who register for literacy classes never show up in class; a large number of those who do turn up for the first class meeting never return; attrition continues steadily thereafter. Systematic compilation and model-driven analysis of such data could yield an informative
quantitative picture of different types of barriers to program participation. Combined with qualitative, in-depth interviews with adults who have not participated, have registered but not attended, etc., a useful picture could be put together that could help programs expand their training programs.

**Coping mechanisms and literacy helping networks:**

To understand more about informal adult literacy acquisition we need to know more about the coping and adaptation processes of adult illiterates and functional illiterates. Additional ethnographic data about natural literacy helping networks are critical in this regard, similar to those described in Heath (1982, 1983), Reder and Green (1983, 1985) and Fingeret (1983). It might be feasible for ethnographers of literacy to provide pertinent data and descriptions of literacy helping networks from materials already at hand. Systematic, comparative analyses of such materials might yield some critical perspectives and questions which subsequent R&D efforts could build on in addressing these issues.

**Enhancing illiterates' awareness and interest in training:**

There is a need to develop techniques to enhance illiterates' awareness of the various forms of literacy instruction available to them as well as kindling their interest in participating in such training. Direct advertising through mass media, community outreach efforts and other channels are now being explored. Perhaps the private sector could be drawn into a partnership to develop characters in popular TV series, for example, who have problems reading or writing but enter training and make progress. Obviously, considerable care would need to be taken to create realistic illiterate characters, to avoid stereotyping, and to make the problems and training process believable and attractive. The publicity and attention given to celebrity athletes coming out of the "illiteracy closet" and going back to school is a powerful example to bear in mind.

Pilot studies may well indicate that such characters and scenarios are not a viable strategy for drawing the target population into training, however. There is good reason to believe that many illiterates and functional illiterates will remain program-shy despite such efforts. Another strategy may also be helpful here: Target on the illiterate's helper through media techniques (as Laubach and LVA organizations sometimes do). Most illiterates or functional illiterates have a helper or helpers to assist them with critical literacy tasks: a friend, a neighbor, a relative. That helper can be reached and put into contact with resources with which they can better help their neighbor or friend or relative with the critical tasks or in providing encouragement and support to participate in training. The use of television characters or celebrities as role models for helpers needs to be considered as well.
Techniques for embedding nonformal literacy training techniques in existing literacy helping networks:

Despite expanded and improved efforts to draw nonliterates into literacy training programs, it is reasonable to expect a very large fraction of the target population to remain outside of the service delivery system. It is critical to develop ways of bringing informal training to such individuals within their own settings, as part of their valued activities and within the context of their natural helping networks.

The extent to which informal training capacity can be appropriately and effectively expanded in this way needs to be carefully and sensitively explored through in-depth community literacy work.

Similarly, the process of drawing the curriculum of literacy training from the specific contexts of literacy helping networks needs to be carefully developed. Numerous conversations with individuals familiar with the participant structure of these networks all lead to the same conclusion: Instead of developing curricula from arbitrary assumptions about what literacy tasks all adults "must" be able to perform independently, begin with the particular literacy tasks and activities with which given adults are actively receiving assistance from natural helping networks. These social contexts are the promising precursors for literacy curricula, because they are already familiar to the illiterate participant, who already has supportive functional knowledge and social context for the particular tasks and materials. For example, if a common activity in a literacy helping network involves the use of shopping lists, then develop materials and teaching techniques around those shopping lists. If reading written messages from friends and neighbors is a task with which individuals naturally get help, then use those messages as the pedagogy and curriculum. Ways must be developed to expand the role of the literacy helper to gently stimulate the informal acquisition of the adult illiterate or functional illiterate if appropriate. Such undertakings will require, of course, much careful and painstaking experimentation and development, and will require considerable involvement and rapport with literacy helping networks.
REFERENCES


