The first section of this paper reports the results of numerous literacy studies in which adults were tested on a variety of tasks, including filling out forms, answering questions about newspaper classified advertisements, and dealing with certain facets of consumer economics. The percentage of adults in the United States reported to be literate varied widely from study to study. In the second section, the author explores various definitions of literacy. Literacy has been defined as the ability to respond appropriately to all possible reading tasks, as the presence of reading skills necessary to enable persons to function effectively in society, and as the level of achievement attained by the average child by the beginning of fourth grade. Some researchers have attempted to define "functional literacy," which connotes reading for a purpose related in some way to social utility. The author concludes that literacy is related to specific tasks and specific contexts and that there can be no universal definition of literacy. In the United States, the minimum level of reading ability required for full participation in the social and economic life of the nation appears to be around the eleventh grade level. (GW)
THE ILLITERACY CONCEPT: DEFINING THE CRITICAL LEVEL

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Available evidence indicates that the state of reading in 1977 is no better than it was at the turn of the decade. New investigations lend credence to the disturbing possibility that the situation is in fact more severe than initially proclaimed by the late Commissioner of Education, James Allen (1969), when he stated the following shocking facts concerning reading deficiencies in the United States:

One out of every four students nationwide has significant reading deficiencies.

In large city school systems up to half of the students read below expectation.

There are more than three million illiterates in our adult population.

About half of the unemployed youth in New York City are two or more years retarded in reading.

In a recent U. S. Armed Forces program called Project 100,000, 68.2 percent of the young men fell below grade seven in reading and academic ability.

I would suggest that there remains a lack of clarity regarding the character of the problem -- what actually constitutes being "literate" in the United States. For, what is commonly referred to as literacy bears only incidental relation to the actual activity of reading.

This paper is an expansion of a speech presented at The Second National Conference on Urban Education, Milwaukee, Wisconsin, 1976. Dr. Mack is an Associate Professor of Graduate Education at the Grand Valley State Colleges. He serves on the Executive Board of the (National) Association for Urban Education, and has administered a National Right to Read Effort Community Reading Academy for functionally illiterate adults in the Kent County, Michigan, area.
I propose that literacy is related directly to comprehension of what is read, and comprehension is associated with the individual's experience, environment, and interest. As well, social, ethnic, economic, and cultural realities combine to form the contexts to which comprehension is bound.

Literacy as a concept never plateaus. Rather, in a technological society, it progresses toward new heights and forever seeks new peaks. Levels of literacy that are sufficient for the present may be insufficient for the future. These variables, moreover, are inexorably intertwined with the unique situation of each country's socio-economic and cultural ambiance. I would further suggest that levels of literacy that would suffice to make a person literate in one area of the world would transform them into a functional illiterate in another.

It is for these reasons that there cannot be a universal definition of literacy. The only determiners are derived from the specific character of each nation; just as those of yesterday required more redefinition in order to comply with contemporary realities. As this character undergoes transformation, as the experiences, environments, and interests of the individual within a nation develop, so too will the levels of comprehension (literacy) demanded of its people. As well, a primary factor which mandates the need for continual redefinition is the fact that occupational activity increases in complexity concurrently with and parallel to this process, causing in its wake increasingly complicated reading tasks.

The purpose of this paper is to explore various definitions of being literate or of being illiterate. I must admit that achieving this understanding is difficult because literacy is not a solidary trait; it comprises many sub-skills and varies from location to location. However, definitions of literacy can probably best be determined in terms of levels of "literacy" required to function well in a society.
The Extent of Illiteracy

As part of the International Literacy Day Program held on September 8, 1975, in Washington, D.C., Dr. Thomas Keehn (1975) referred to the world-wide nature of the problem of adult illiteracy which "...holds untold millions in its shackles." According to Dr. Keehn, there are an estimated 785,000,000 illiterate adults in the world. Of these, 62 percent are women. In the United States, more than 50 percent of the adult population is considered either functionally illiterate or marginally illiterate, i.e., they do not have the educational tools to cope with personal, community, social and economic problems that confront them daily.

The extent of illiteracy in the United States may vary considerably, depending somewhat on the method of assessment used. The Census Bureau (Statistical Abstract, 1974) considers literate anyone 14 years of age or older who has completed sixth grade. Those who have not completed the sixth grade are asked whether they can read and write a simple message in any language; if they say, "Yes," they are considered literate. Based on this credulous method, it is estimated that approximately one percent of those aged 14 years and older are illiterate.

The National Center for Health Statistics (1973) has conducted a survey using their Brief Test of Literacy, which shows that 4.8 percent of individuals 12-17 years old score below the average 4th grader on the instrument and can therefore be regarded as illiterate.

Louis Harris (1970) was commissioned by the National Reading Center to conduct a study of adult functional illiteracy. His survey team asked respondents to read and fill in the appropriate information on five forms -- application for public assistance, application for Medicaid, application for a driver's license, personal identification form, and a personal loan application. Using the
critiation of 90 percent correct responses on these forms, Harris reports that 13 percent of the sample, or an estimated 18.5 million Americans, fell below that level -- that is, were marginally literate to functionally illiterate in terms of ability to perform these tasks.

A second survey completed by Harris in 1971 explored deficiencies in the United States. The research focused on reading skills that are required to cope with everyday experiences common to most Americans. It concluded that 4 percent of the U.S. population 16 years of age and older suffers from serious deficiencies in functional reading abilities. Blacks had a level of difficulty that was nearly three times as high as for whites. Income level and age were found to be highly related to reading ability. Easterners and Southerners scored lower than those in the Midwest and West.

In the same study, Harris analyzed respondents' ability to successfully answer straightforward questions about newspaper employment advertisements. Ninety-two percent of the total sample got all nine of the questions correct, although 70 percent of all blacks tested got nine correct. Survey personnel obtained similar results using classified housing advertisements: 88 percent of those surveyed got all items correct. Blacks averaged 67 percent correct of all the housing advertisement questions.

In order to develop a representative pool of competencies attributable to a literate person, Northcutt's (1975) Adult Performance Level Project (A.P.L.) conducted an extensive literature search surveying governmental agencies and foundations to determine the characteristics of successful and unsuccessful adults; and interviewed adults who were under-educated and under-employed, employers, and personnel specialists. The necessary skills identified during this study can be grouped into the following four areas: (a) communication skills, (b) computational skills, (c) problem solving skills, and (d) interpersonal skills.
A.P.L. also identified five general knowledge areas (a) occupational knowledge, (b) consumer economics, (c) community resources, (d) government and law, and (e) health.

Because these skills demanded more than the ability to use or comprehend written material, they did not fit comfortably within the general concept of literacy. Therefore, A.P.L. staff substituted the term "functional competency" for "functional literacy."

Using a national sample (1,500 respondents), the Adult Performance Level Project has determined that as many as 20 percent of the adult population are functionally incompetent. Indeed, the study concluded that nearly 35 million adults have trouble buying life insurance, using credit, shopping wisely, and handling other facets of consumer economics; one-fourth of all Americans cannot understand their rights and obligations under our system of government and law; one in five adults have trouble with the basics of finding, getting, holding, and advancing in a job. Finally, in the skills tested -- reading writing, computation, problem solving, and interpersonal relations -- the 1,500 people surveyed had the most trouble with computation. Projected to the total population, the A.P.L. study concluded that 39 million Americans are unable to perform basic computations and that another 35 million can barely get by.

In an evaluation of the Right to Read Effort after four years, Dr. Ruth Love Holloway (1975) reported that it was difficult to interpret to the nation as a whole that a country which was so affluent as the United States had between 15 and 17 percent of its people functionally illiterate. As of 1971, there were some 18 million adults who were considered functionally illiterate and seven million elementary and secondary school children who had reading deficiencies sufficient to cause problems in the schools. She reports that the problem
appeared to be so massive that a committee established the following goal for the National Right to Read Effort:

To ensure by 1980 that 99 percent of all people under 16 years old living in the United States and 90 percent of all those over 16 would possess and use literacy skills. (Holloway, 1975)

Defining the Condition of Literacy/Illiteracy

The historical American definition of literacy has been that it is nothing more than the ability to read and write one's name, or to score at some grade level on a standardized test. Webster's (1976) defines literacy as the ability to read and write. Black's Law Dictionary (1968) defines an "illiterate" as unlettered, ignorant, unlearne and generally used of one who cannot read and write.

Robert F. Barnes (1965) provides his observations about illiterate adults in a speech delivered to an assembly of adult basic education teachers. He states that they are the low-income, un- or under-educated. He suggests that we must classify them as a society rather than a segment of our total society. Why? For reasons such as:

1. They have a separate system of values that are different from those of our great, affluent, snobbish class mess that we call society.
2. As a result they, in general, have been forced to adopt a set of morals that are not quite acceptable to our middle class society.
3. They have established their own hierarchy or "peck-order."
4. They have their own power structure.

In defining non-readers, the Mott Basic Language Skills Program (1966) makes reference to their having "...less than five years of reading ability." Illiterates are divided into: (a) non-readers who might be classed as lazy; (b) individuals who did not have the opportunity to go to school; (c) individuals who had certain limitations, handicaps, and difficulties which made reading a superhuman effort; and (d) adults who matured slowly and did not have the "readiness"
to learn reading when it was offered. Additional synonyms for illiterates include non-reader, second-grader, sub-functional, slow, undereducated, poor-readers, dropouts, and functional illiterates.

In a recent request for proposals, the United States Office of Education (1976) infers that literacy is the presence of requisite reading skills necessary to enable individuals to function effectively in society. As well, a National Right to Read Effort (U.S.O.E) pamphlet, Literacy -- A Must for All, refers to a profile of inmates in the federal prisons functioning at the 5th grade level or below in reading ability. It is easily conveyed that this is the critical level in distinguishing literate from illiterate offenders.

The National Center for Health Statistics study, Literacy Among Youths 12-17 Years (1973), defined literacy as that level of achievement which is attained by the average child in the United States at the beginning of fourth grade. Using items on the Brief Test of Literacy based on this definition, their test was validated on a group of fourth graders. If a 12-17 year old youth passed the reading section, they were termed "literate." If they failed the reading section, they were termed "illiterate."

The term "functional literacy" connotes reading for some purpose -- a purpose in some way related to social utility. William S. Gray (1969) defines functional literacy as the ability to engage effectively in all those reading activities normally expected of a literate adult in his community. This definition, while circular, does emphasize the fact that certain tasks are required of adults by members of their community.

Harman (1975) in examination of levels of literacy required for minimum functioning indicates that the critical level is particularly high, and has risen dramatically since World War II. He cites one recent study (Sticht, 1975) which
concluded that an 11th grade reading level was the minimum literacy requirement for most military professions (7th grade for military cooks, 8th grade for repairmen, and 8th grade for supply clerks) and these correlated significantly with civilian pursuits. He suggests that if an 11th grade level is stipulated as a minimum necessary requirement then surely a desirable minimum level of functional literacy would be even higher.

Bormuth (1974) states that in the broadest sense of the word, literacy is the ability to exhibit all of the behaviors a person needs in order to respond appropriately to all possible reading tasks. Of course, this definition is highly comprehensive, and no one would be literate to this extent.

Sticht (1975) defines functional literacy as "a possession of those literacy skills needed to successfully perform some reading task imposed by an external agent between a reader and a goal the reader wishes to obtain." He suggests that this excludes such reading activities as reading for pleasure. Also, he differentiates between reading to learn a job and reading to do a job. As a rule, the former requires a higher level of literacy than the latter.

In a related effort, under a contract with the Bureau of Adult, Vocational, and Technical Education of the United States Office of Education, researchers attempted to describe "functional literacy" in pragmatic behavioral terms and to develop devices for assessing literacy that would be widely used. In pursuing these objectives, the Adult Performance Level Project staff (1973) analyzed the components of adult literacy, reaching three crucial conclusions:

1. "Literacy" is a construct which is meaningful only in a specific cultural context. Furthermore, as technology changes, the requirements for literacy change.

2. "Literacy" does not consist of just a single skill, or even two skills. It is best defined as the application of a set of skills to a set of general knowledge areas.
3. "Literacy" is a construct which is directly related to success in adult life.

Conclusions

The way in which "literacy" is conceptualized has profound implications for the kinds of programs and processes that are created to reduce or eliminate illiteracy. Unfortunately, no standard definition of literacy exists, and estimates of the extent of illiteracy in the United States varies greatly.

Literacy is not, in and of itself, and objective. The real aim is that of social and economic participation and reading is but a tool--one means for its attainment. Research indicates that in the United States the levels of reading comprehension necessary for such participation are predictably high and have risen dramatically since World War II.

A U.S. Department of Labor study (1970) indicated that at the end of the 1960's the median years of schooling completed by Americans 25 years of age and above was an impressive 12.3 years. They have predicted that by the end of the 1970's, the median grade level will have climbed to around 12.5 years. In a more recent study conducted by the U.S. Department of Labor (1975), fewer than 2 million people were reported to have had only a fifth grade or lower education in 1970 and that figure is expected to drop to about 1.4 million by 1980.

We may conclude that the minimum level of reading ability, required for full participation in the social and economic life of the U.S., is around the eleventh grade level. As well, the minimum level required to actively participate in the economic and social order may be considered as a measure of a nation's literacy level.

Completion of a set number of years of schooling does not provide assurances that individuals do in fact perform and retain performance levels paralleling those of the grades completed. This situation, to the relief of many dedicated educators, does not reflect the efficacy of schooling but might well indicate that skills once learned regress when not put in use. Wherefore, it shifts the
onus of the poor performance from the school to the individual.

Adequate evidence suggests that school attendance does not guarantee scholastic achievement commensurate with the grade level attained. Not all high school graduates can read at a 12th grade level, or eighth grade students at an eight grade level, and so on. Various studies have concluded that over the past few years that the inability to read is far more widespread than census data might lead us to believe.

As well, the impact of the employment sector must be regarded in the study of literacy. During the past several decades, there has been a major shift in the proportions of people employed in various areas of the labor market. Its demand in terms of educational qualifications has been rising, in turn inducing growing numbers of people to seek additional education. The high levels of reading requirements for job performance ("relative functional literacy") could well be a function of this shift since job-related materials seem to be linguistically more complicated in disregard for the reading public.

In summary, you cannot say universally a person who has attained a fifth grade level of reading is a literate person and one who has a lesser degree of reading ability is illiterate. Fifth grade reading would make a very literate person in the Ugandan context, but would be totally inadequate in the context of the United States or some of the highly developed countries of the West. By developing an international yardstick, there is no literacy problem in the United States, but by the measure which should be applied internally, we are in a crisis situation.
REFERENCES

ADULT PERFORMANCE LEVEL STUDY: INTERIM REPORT (1973) Austin, Texas: University of Texas, Division of Extension.

ALLEN, J. E., JR. (1969) "The Right-to-Read-Target for the 70's." Address before the 1969 annual convention of the National Association of State Boards of Education, Los Angeles, California.


