THE UNEDUCATED

The Uneducated

by ELI GINZBERG
and
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THE CONSERVATION OF HUMAN RESOURCES was established by General Eisenhower in 1950 within the Graduate School of Business of Columbia University. Philip Young, Dean of the Graduate School of Business, was appointed administrative head of the project. He has been responsible for its supervision. Eli Ginzberg, Professor of Economics in the Graduate School of Business, is Director of the Project.

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FOREWORD

IN PUBLISHING THE RESULTS of a large-scale investigation, it is customary for the author to present in a short preface a description of the initiation of the study and the methods used, and to acknowledge the assistance he received. However, this conventional practice is not suitable as an introduction to the present work.

The Uneducated has a long heritage as well as a special position within the orbit of the research into the field of human resources which is being carried on at Columbia University. Since the late 1930's my collaborators and I have been engaged in a series of studies aimed at increasing the understanding of the basic role of human resources in our contemporary economy. These investigations resulted in four major publications: *Grass on the Slag Heaps: the Story of the Welsh Miners* (1942); *The Unemployed* (1943); *The Labor Leader* (1948); *Occupational Choice* (1951). So much for the lineal heritage of *The Uneducated.*

Impressed with the striking evidence of the wastage of manpower revealed during World War II, General Eisenhower, shortly after coming to Columbia University, took the initiative in establishing a large-scale research project under the title "The Conservation of Human Resources." This Project has a twofold objective: to deepen the knowledge of the fundamentals of human resources, and to show how new knowledge can contribute to sounder public policy aimed at reducing the wastage of the nation's most valuable resource.

As pointed out in the *Progress Report* which was published in June, 1951, the Conservation of Human Resources has a threefold approach. First, studies are being made of groups in our society which have one or another serious handicap that militates against their effective performance. At the other extreme, the

Project is concerned with developing a fundamental approach to the study of those who possess talent and who are capable of superior performance. The third major effort of the Project is directed toward increasing the appreciation of the fundamental changes that have taken place in the role of work in our society since the turn of the century and the import of these changes for the satisfaction of the individual, the productivity of the economy, and the welfare of the society.

The Uneducated is the first of the several investigations to reach completion. This study of the poorly educated in military and civilian life—one major group of handicapped persons in our society—is related to an investigation now under way of another handicapped group whose performance is interfered with by emotional difficulties, to be published under the title *The Ineffective Soldier.*

The Conservation of Human Resources Project was set up initially and has been operating as a cooperative venture undertaken by the University; the business community; public groups, such as foundations and trade unions; and the Federal Government. In sponsoring the undertaking the University provided the professional staff; industry, the financial support; and the Federal Government, basic statistical compilations and case materials.

The book contains large bodies of original materials drawn from both military and civilian life. The Department of Defense assisted us substantially by making available to us the records of our military manpower experience during World War II. Each of the three Departments, Army, Navy, and Air Force, assisted, but the contribution made by the Department of the Army was of the greatest importance. Our substantial reliance upon the experience of the Army grows out of two facts: during World War II and until 1948 the Army and Air Force operated as one department, at least as far as personnel records were concerned. Moreover, my own ten years of experience with military manpower problems and policies was with the Army.

The individuals who contributed significantly to the present study are mentioned by name and organization in the acknowledgments which follow this Foreword. At this point reference will be made only to the assistance provided by major organizations.

The Department of the Army helped materially: The individual case records of illiterate and poorly educated soldiers, which are analyzed in detail in Chapters 6 and 7, were developed through the cooperation of the Adjutant General's Office, both at Headquarters in Washington and, more particularly, at the Demobilized Personnel Records Branch in St. Louis. In the spring of 1951 draft chapters of the monograph which outlined the theoretical structure were submitted by the Assistant Secretary of the Army for Manpower and Reserve Affairs to the Chief of Staff for critical evaluation. The reply, which proved very helpful to us, was a composite of the thinking of both senior line commanders and technical experts. At about the same time the Secretary of the Army offered me an opportunity to discuss the preliminary findings with his senior advisors; this also proved most constructive and stimulating. The quality of the assistance provided by the Army can best be indicated by stating that the Demobilized Personnel Records Branch at St. Louis was able to provide us with detailed information about every single individual on the eight rosters of names which we submitted.

Although this particular book could never have been written in this particular manner without the wholehearted cooperation of the Army, it is important to emphasize that the analysis, conclusions, and recommendations are the sole and complete responsibility of the authors.

Since we were interested in learning about the readjustment to civilian life of those poorly educated persons who had had the advantage of special training within the Army, we sought the assistance of the Veterans Administration. It provided us with the current addresses of these men and, further, indicated the use which this group of veterans had made of the benefits which were available to them. Chapter 8 is based on the replies which we received to the questionnaries that were sent to these veterans. Our ability to reach them was the direct result of the help which we received from the Director, Coordination Services of the Veterans Administration. We are also indebted to the men who answered the questionnaries.

A major objective of the study of *The Uneducated* was to determine as accurately as possible the practices that had been

followed during World War II in screening the population for military service and, in particular, to learn more about the numbers, characteristics, and residences of the young men who were rejected for service because of an inability to pass the mental tests. In developing these materials, which are presented in Chapter 4, we were considerably aided by the Selective Service System; the Office of the Surgeon General, Department of the Army; and the Bureau of the Census.

We also received assistance from the Department of Labor, particularly in connection with Chapter 9, which deals with the experience of Southern industry in the employment of the poorly educated; from the Department of Agriculture, which helped to provide some perspective on the behavior of the poorly educated in Southern agriculture; and from the Office of Education, Federal Security Agency, which has a very real and continuing interest in all phases of the problem of illiteracy and which made its knowledge and competence available to us. The Office of Senator Harley Kilgore of West Virginia, who has sponsored Federal legislation to eradicate illiteracy, assisted us by providing background materials.

In seeking to improve our understanding of the specific factors influencing differential rejection rates within particular states, we sought and secured the assistance of the Departments of Education in the following states: Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia. Their replies to our inquiries contributed much to the analysis in Chapters 4 and 11.

The New York State Employment Service provided us with information about the difficulties encountered by the poorly educated in seeking employment. This helped us to sharpen our understanding of the differences between the truly mentally deficient person and the person who has been educationally deprived.

In studying the role of the uneducated migrant, we received assistance from the Michigan Unemployment Commission, specifically from offices in the Detroit area which are directly involved in registering and finding employment for migrants and others out of work.

Among the other governmental agencies that assisted at one or

another point of our investigation were: the Armed Forces Induction Station, New York City, which facilitated our acquaintance with current practices in the mental testing of recruits; and the Bureau for Children with Retarded Mental Development of the New York City Board of Education, which helped us to see more fully the relation between mental retardation, special education, and work performance.

Although it was not practical to include in this book much material about the role of the uneducated in other countries, we desire to acknowledge the assistance which we received from several foreign sources. Specifically, we are indebted to the Department of Labour, Canada; the Ministry of Defense, and Ministry of Labour and National Service, and the Department of the Army, United Kingdom; and the Office of the Supreme Commander, Allied Powers Europe, through which we secured helpful information about the military manpower practices, past and present, of the Armed Forces of France and Italy.

In addition to this substantial assistance from governmental sources several non-governmental agencies proved helpful. The National Research Council had been carrying on investigations based on the records of former members of the Armed Services, and its staff helped us to develop the procedures on which Chapters 6, 7, and 8 are based. The National Association for the Advancement of Colored People and the National Urban League made available to us important materials bearing on the educational and work experience of Southern Negroes. Even more valuable were the discussions we had with the staffs of these two organizations concerning the interpretation of various facts and trends. The American Friends Service Committee and the International Brotherhood & Protective Order of Elks of the World also contributed to our understanding of the past and present position of the poorly educated within the South.

In developing Chapters 9 and 10, we relied to a very considerable extent on the information which we gathered through the following sources: The Richmond Area Guidance and Personnel Association put us in direct contact with representative employers in its area. The Charlotte Personnel Directors Association considered a series of questions which we had submitted and sent us a com-

posite reply. The Personnel Association of the Greensboro Area developed a special questionnaire on the basis of our inquiry and furnished us with statistical information and illustrative materials based upon the replies received from twelve of its members. We received written communications from the following additional organizations: Burlington Mills, Greensboro, North Carolina; Crawford Manufacturing Co., Richmond, Virginia; Hercules Powder Co., Radford, Virginia; Humble Oil & Refining Co., Houston, Texas; Industrial Cotton Mills (Division of J. P. Stevens), Rock Hill, South Carolina; Plantation Pipe Line Co., Atlanta, Georgia; Reynolds Metals Co., Richmond, Virginia; Richmond Engineering Co., Richmond, Virginia; Sidney Blumenthal & Co., Inc., Rocky Mount, North Carolina; Sunoco Products Co., Hartsville, South Carolina; Vick Chemical Co., Greensboro, North Carolina. We were further assisted in developing Chapters 9 and 10 by the discussions of the industrial employment of the poorly educated we had with the staff personnel of General Motors, the Ford Motor Company, the United Automobile Workers-CIO, the Textile Workers Union, and the International Brotherhood of Teamsters.

Members of the following faculties made contributions to one or another stage of the research: Brooklyn College, Columbia University, Yale University, University of North Carolina, University of Texas, Northwestern University, Tuskegee Institute, and the University of Oklahoma.

The scale of *The Uneducated* can be briefly summarized. In Part I, "Education and Society," the major changes which have been taking place in the educational level of the American public are detailed against the background of changes in schooling and in the structure of the economy during the past half century. Despite remarkable improvements in the reduction of illiteracy, the detailed analysis of men rejected for military service during World War II throws a spotlight on the sections of the country where progress has lagged.

In Part II, "Military and Civilian Performance," a unique body of case materials is presented concerning the ability of the uneducated and poorly educated to perform effectively within a military organization once they have been afforded an opportunity to

acquire basic literacy. This analysis challenges the conventional belief that a relatively high educational background is necessary for successful military performance. An analysis of the relation between educational background and civilian performance confirms the finding that emerged from a study of the military that many individuals can perform effectively despite a minimal amount of education. However, there is much evidence that industry encounters serious difficulties when it seeks to integrate a small number of illiterate or poorly educated persons into an organization in which most employees are literate.

In Part III, "Human Resources Policy," the consideration is advanced that there is a sound basis for providing Federal assistance to the poorer states to improve their educational systems. Current military policy which is resulting in the rejection of large numbers of young men who fail the mental test is held to be in error, and the recommendation is advanced that the Armed Forces accept much larger numbers of these poorly educated persons and give them the benefit of special training. The concluding chapter emphasizes the fact that the nation as a whole can no longer remain indifferent to regional and local deficiencies in the education and training of youth since its security and welfare depend upon the full utilization of its human resource potential.

Although primary responsibility for *The Uneducated* rests with the authors, it was shared at every stage of the work with their colleagues on the staff of the Conservation of Human Resources Project. Literally, each member of the staff made a significant contribution. There may be some basis for contending that the demonstration of how a project of this scope involving the active participation of so many organizations and individuals was designed and carried out is as important as the presentation of the specific findings and interpretations. For, if our understanding of the major facets of the problem of human resources is to be enhanced, it will be necessary to develop and carry through to completion a significant number of such large-scale cooperative investigations.

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As indicated in the foreword, each member of the staff contributed significantly in the preparation of this book. Special note must be taken, however, of the work of James K. Anderson who developed the basic statistical framework for the analysis of the flow of military manpower during World War II and for the procedures used in developing the case materials of men who were assigned to the Special Training Units; and that of Robert W. Smuts who is largely responsible for developing the basic data and analysis underlying Chapter 3 and for the preliminary analysis of Chapters 9, 10, and 11. Jeanne Tomblen saw the manuscript through successive drafts, and Ruth Szold Ginzberg carried the major editorial burden.

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PART I

EDUCATION AND SOCIETY

CHAPTER 1

OUR HUMAN RESOURCES

DURING WORLD WAR II more than 5 million men liable for military service were rejected as unsuitable because of a physical, emotional, mental, or moral disability. Since about 18 million men were examined, this implies that approximately one out of every three young men was considered so handicapped that he could not serve his country in uniform during a major war. In the year following the outbreak of hostilities in Korea about 500,000 of the million and a half men examined were rejected. Once again, the number and proportion of handicapped men were very large.

Hidden within these startling figures is the still more startling fact that during World War II, 716,000 men were rejected on the grounds that they were "mentally deficient." At the peak of mobilization the Army had eighty-nine divisions. Those rejected for mental disabilities were the equivalent in manpower of more than forty divisions. In the year following the outbreak of fighting in Korea more than 300,000 were rejected on this same ground of "mental deficiency." Some were truly mentally deficient; many more were educationally deprived.

The full mobilization which occurred during World War II and the partial mobilization which we have experienced since hostilities commenced in Korea precipitated new policies with respect to our national manpower resources, primarily the use of compulsion for the screening and selection of men for the Armed Services. As a by-product of this screening process for securing manpower, a large amount of information was obtained about

every individual called for examination. The results of these examinations contain a wealth of data about the nation's human resources.

Although this information was collected as part of a military manpower operation, it is relevant for assessing the qualities and capacities of an important sector of the population for meeting the requirements of industry and the obligations of citizenship. The information obtained was certainly determined by the type of tests used by the military services. The range and number of disabilities uncovered by the examinations were, however, reflections of pre-existing conditions; the examinations merely brought them to the surface.

It seems strange that the serious shortcomings inherent in the population revealed by these examinations had gone unnoticed in previous years, or if noticed, had failed to lead to remedial action. This question has particular pertinence with respect to the large number of young men in the country who were rejected for military service because they were adjudged to be mentally deficient. The United States has long been recognized as one of the richest countries in the world as well as one of the most democratic. One reflection of this economic well-being and democratic orientation has been the emphasis that has been placed for many generations on education, particularly free education, for every boy and girl in the country. Yet at the outbreak of World War II more than 4 million men in the labor force had less than five years of schooling; about 1.5 million were totally illiterate.

The explanation of this apparent paradox between the nation's large-scale development of a free educational system and the incontrovertible evidence of large numbers of poorly educated and uneducated persons in the population must be sought in the underlying philosophy and policy which has governed our approach to human resources. In order to understand the persistence of large numbers of poorly educated and totally uneducated individuals, it is necessary to review the way in which American society has thought and acted about its human resources.

From the time of Thomas Malthus the Western world has been warned of the danger of a redundant population; Malthus and

his followers contended that man very possibly would multiply so rapidly he would press ever more severely on the limited food supplies, with the result that he would live close to or at a starvation level. However, it became clear early in our history that the resource balance of the United States was unique in that we were engaged in the settlement and development of a country rich in natural resources and sparse in population.

This favorable balance resulted in the establishment of one basic manpower policy—free immigration. The only limitations that were established at first were the prohibitions placed on "trading in immigrants." Early in the nineteenth century the importation of slaves was interdicted, and later in the century contracts entered into by immigrants in exchange for their passage were no longer enforceable. Still later, as it gained strength, organized labor attempted to have limitations placed upon the substantially free and uncontrolled flow of immigrants into the United States. These attempts were made in the hope that if the numbers available for employment were restricted, the working conditions and wages of those already in employment could more easily be protected and enhanced.

Labor was not the only group which manifested an interest during the latter half of the nineteenth century in establishing at least selective controls over the flow of immigrants. An increasing number of farmers, professionals, and business men expressed concern about the "quality" of various groups of immigrants. Their argument centered around the difficulties that would be encountered in trying to assimilate them into the older population which had already sunk its roots and was developing an American civilization. The restrictionists gained strength with every year, but it was many decades before they succeeded in having written into the law specific quotas that would markedly reduce the numbers seeking admission. It was not until 1920 that effective legislation was passed, although during the preceding decades specific barriers had been erected against certain groups, such as the Orientals and Europeans who failed to meet minimum physical, mental, and moral standards.

The history of immigration legislation is pertinent on several counts. We have noted that it was the only significant piece of

early national manpower policy. The first unrestricted immigration policy encouraged for a long period of time the free flow of people into the United States and helped to provide the large numbers required for a speedy and effective exploitation and development of the country's rich natural resources. The fact that it was not possible for the proponents of a restricted immigration policy to win approval of their position until the close of World War I suggests the continuing and strong demand for labor that typified the United States during the period of frontier settlement and large-scale industrialization. Even after quotas were established, special provision was made to facilitate the immigration of skilled and professional personnel in recognition of the fact that throughout its history the United States had demonstrated a relative shortage of these classes of persons.

The fight for a restrictive immigration policy, which was waged for more than a half century before it was successful, involved much more than a consideration of the relative economic advantages of a larger or smaller inflow of immigrants. There can be no doubt, however, that an important part of the explanation of the strong opposition to restriction derived from the conviction of many that it would be economically disadvantageous to interfere with the large-scale increase in the working population. But by 1920, when the restrictive legislation was finally passed, this fear was no longer paramount. During the war, immigration had diminished considerably, but the country was still able to meet the demands for labor required by the industrial expansion which took place in response to the war, as well as the labor to substitute for the 4 million men who were called into military service. Although individual manufacturers encountered difficulties in securing the number of workers, particularly skilled workers, which they required for their expanded operations, the country as a whole had important reserves; underemployed farm workers were attracted to the cities; increasing numbers of women entered employment; and many Southern Negroes moved to the North to take advantage of the new opportunities which were open to them.

Since their demands for manpower during World War I had been met without too many difficulties, it is not surprising that the

Armed Services, in developing their mobilization plans for the eventuality of another major crisis, failed to contemplate the possibility that the nation's manpower resources would prove inadequate. Since so much of the planning took place during the 1930's, when the economy was plagued by large numbers of unemployed, the planners were further deflected from any consideration of a possible manpower stringency in the event of a new mobilization.

That the planners were justified can be demonstrated by recalling that during World War II the nation's manpower reserves were sufficiently large to enable the Armed Services to reject for service approximately one out of every three men whom they examined. Although both the military and civilian sectors did have to make various adaptations during the course of the war in view of the dwindling manpower reserves, the country was able to come through this major effort successfully, without recourse to the use of major compulsory controls over people. Once again, there were large reserves that helped meet the expanded demand: the unemployed, adolescents, women, farm workers, older persons.

Despite the phenomenally rapid expansion of the United States during the last century, then, there is no evidence to point to a conclusion that the country suffered from general manpower shortages, although, of course, particular shortages were encountered as the frontiers were pushed back. During more recent history the United States was able to engage in two major wars and make an outstanding contribution to Allied victories without substantial curtailment of its civilian production. This history helps to explain the relative lack of concern with the quantity of the nation's human resources and the willingness of the public to support a restrictive policy on immigration after World War I.

In addition to the sphere of immigration, national manpower policy can be traced through a series of voluntary and governmental actions that were specifically directed to influencing the quality of our human resources. The long struggle to emancipate the slaves was an attempt to abrogate a system that deliberately and wilfully condemned large numbers of human beings perma-

nently to an inferior station and way of life. Many Abolitionists considered it a crime against God to treat men, women, and children solely as economic instruments. They held that human beings are always the end, as well as the means, of social effort.

During the middle of the nineteenth century there were various reform movements spearheaded by public-spirited citizens aimed at protecting vulnerable groups in society from the risk of economic exploitation or personal degradation. One such effort was directed at protecting children from cruel or incompetent parents or guardians. The reformers recognized that the child could not take care of himself, and it was therefore essential for society to protect him if his parents failed in their duty. About the same time, forward-looking citizens became concerned about the barbarous and inhuman treatment of felons and led the movement for penal reform. They argued that cruel and unusual punishments violated the basic tenets of religion and ethics and, moreover, that such punishments failed in their purpose. Criminals subjected to them would more likely become hardened in their ways of crime and violence than encouraged to reform themselves and become law-abiding and useful citizens.

Major efforts were also made to awaken the public's conscience about the treatment of the mentally ill. The reformers were concerned primarily with protecting the mental patient from unnecessarily repressive and harsh treatment. They were motivated more by humane considerations than by a conviction that an improved regimen could significantly alter the course of the disease or the probability of recovery. The second half of the century also witnessed growth of the movement to outlaw the use of alcohol. The early prohibitionists were deeply concerned about the social and economic havoc resulting from intemperance that deprived so many women and children of food and subjected them to the brutality of intoxicated men. During the period between the Civil War and World War I there continued to be also a series of related efforts directed toward the prevention, amelioration, or cure of conditions that were considered to have an adverse effect on the quality of the citizenry, particularly those who were unable to take care of themselves—children, women, the sick, and the aged.

It was not until the 1870's and 1880's that there came to the forefront a movement of social improvement and reform by the working population as a whole as distinct from one undertaken by voluntary groups or government to protect the weak and helpless. From its inception, the trade union movement spoke for all workers, although it found its major strength and support among the more skilled and affluent members of the working population. A major objective of organized labor was to reduce the length of the working day. The assumption was that the worker would never be able to lead a satisfactory life until he was freed from excessive hours of toil. The early trade unions also placed great emphasis on securing higher wages and safeguarding the worker's right to his job. In seeking for labor a significant share of the ever-expanding national income, the trade unions were determined to gain from industry the wherewithal for the worker and his children to share fully in the promise and enjoyment of life in the United States.

Although the trade unions grew in strength from decade to decade, and made spectacular temporary gains during World War I, they did not really solidify their position until the outbreak of World War II. Even today, organized labor has within its ranks no more than one out of every three possible union members. As late as 1920, Samuel Gompers had to struggle to exclude from the Charter of the International Labor Organization the words, "Labor is a commodity," and he succeeded only to the extent of modifying the phrase to read, "Labor is not solely a commodity." Increased concern for the quality and dignity of our human resources has come slowly.

References should be made to two significant developments of recent decades which bear directly on the changing attitude of society toward the worth of human beings. Major advances in medicine have resulted in a widespread expansion of communal and governmental efforts to provide free or below-cost medical services for individuals who require them but who are unable to pay for them out of their own resources. There remains a widespread conviction that additional steps must be taken to insure that the promise of modern medicine is made a reality for all, irrespective of ability to pay. This belief is grounded in humani-

tarianism but gains support from faith in the ability of medical services to contribute to the economic well-being of the individual and society.

The other development that has taken place during this century is the responsibility assumed by the community for the care of the unemployed. The Great Depression of 1929–33 proved conclusively that unemployment could no longer be viewed as the failure of the individual to cope effectively with his responsibilities. With 13 million unemployed out of a labor force slightly in excess of 40 million, the evidence was overwhelming that unemployment was a social rather than an individual disease. Government had to accept the responsibility for supporting the unemployed until they could again find work. So devastating was the impact of unemployment upon the individual, his family, and society, that governments have moved beyond the simple responsibility of supplying funds for subsistence to men out of work. They have undertaken to insure that large numbers of men do not again fall out of employment and remain on relief for any length of time. The recognition of the importance of work—it is too early to talk about the right to work—represents perhaps the outstanding change which has taken place during the past century in the fundamental attitudes of the country toward the importance of its human resources.

The basic philosophy of the country toward the individual and governmental responsibilities that prevailed throughout the nineteenth and the early part of the twentieth century implied that there would be very little active concern with the quantity and quality of the nation's human resources. As was true of every facet of life, major reliance was placed upon "natural processes"; group action was reserved to meet very special challenges. There was no agency of society charged with the responsibility of assessing whether the total manpower resources of the country were adequate or not, or of considering the various types of action which might be taken to improve the quality of the resources which were available. The first decade of the twentieth century saw a major effort directed toward the conservation of natural resources, but the impetus of this movement did not carry over to human resources. There is one more facet of our national life

that must be reviewed before this judgment can be considered final: education.

With roots stretching back to the early colonial period, free public education has been an outstanding characteristic of the American way of life. The original impetus was heavily religious: only the literate man could read his Bible, and only a man who read his Bible could be religious. Over the years it became clear that a democracy grounded in universal suffrage could flourish only if the electorate were able to inform itself of the issues and their merits. When in the nineteenth century the discrepancies between rich and poor threatened the very fabric of the democratic society, renewed emphasis was placed upon the contribution that a free educational system could make to prevent the establishment of rigid classes. With education, the poor but ambitious boy could advance himself to the limit of his ability.

From time to time it was recognized that, over and above the very important values which were protected and strengthened by a free educational system, there were more specific implications for the productive potential of the country. During the eighteenth century, particularly in England, there had been a long and acrimonious debate about whether it was desirable to teach the majority to read and write. The conservatives argued that it was unwise from a national viewpoint to educate the laboring population, for unskilled workers might then become dissatisfied with their employment and might refuse to do the unpleasant work which required doing. Adam Smith, the outstanding proponent of individualism, argued against such critics by insisting that the "skill, dexterity, and judgment of labor" was the foundation of national wealth. For the most part, the American tradition has reflected an acceptance of Smith's position, although it never went so far as to accept the full implications of his position that the wealth of nations was to be found more in the quality of labor than in the "soil, climate, or extent of territory."

We are only slowly becoming aware of the extent to which the economic development of the United States has been grounded in rapid progress in science and technology and the extent to which this progress is in turn dependent upon adequate numbers of well-trained scientists and specialists. The contributions of these

highly trained people are always dependent not only on their own competence and skill but on the capacities and other qualities of the large working force required in a modern industrial economy. The contributions of a literate and active labor force have also been underestimated until recently when the differences between the rate of economic development in the United States and in other parts of the world became subject to careful analysis.

Although the American effort to provide an ever-higher level of education for the mass of the population was unique and largely successful, relatively little attention was paid to conditions which indicated that in certain parts of the country, and particularly with reference to certain groups, there was little or no participation of the local population in the expanding educational efforts that characterized the country at large. Fundamentally, responsibility for basic education has always been considered to devolve in the first instance on the family and the local community. When certain isolated regions manifested little interest in developing an adequate educational system or, more frequently, when the efforts of communities were restricted by inadequate resources, the implications of such failures were not considered to have significance for the country as a whole.

It is difficult, however, in the face of the large-scale rejections of men liable for military service during World War II and again during the Korean war, to maintain that the education and training of the people of the United States remains solely a family and local matter. The quality of our human resources has a demonstrably significant influence on the nation's security and welfare. Moreover, if an individual is unable to function effectively as a citizen, soldier, or worker without the benefit of at least a minimum education, the country cannot remain indifferent.

Irrespective of its actions in the past, the United States must now recognize that its security and prosperity depend primarily on the conservation of its human resources. With only 6 percent of the world's population, this country is committed to the maintenance of large military forces and to contributing to the support of the free nations of the world. This national and collective security effort is without parallel in history. To accomplish it without jeopardizing the mainsprings of our social and economic

strength will necessitate the maximum use of all our resources, both natural and human. In the current struggle between democracy and totalitarianism, we are contending for the souls and the minds of men. To be victorious, we must win to our side those who are still undecided. We can no longer assume that what we do, or fail to do, at home is of concern only to ourselves. Every action that we take or fail to take counts as a forward or backward step in the current struggle.

CHAPTER 2

THE ACCOMMODATION OF EDUCATION TO SOCIETY

THE EDUCATIONAL SYSTEM is one of the major institutions through which a society gives expression to its values and goals. Although the types of educational systems have been as varied as the societies which developed them, every community has developed some mechanism for educating the young in the ways of the old. There were several characteristics of the American culture and economy during the decades when its educational system was being developed which had important influences on the system. In turn, many facets of American society were influenced by the expanding educational structure.

The structure developed in the United States can be differentiated from those of most other nations, even those which have shared with us the traditions of the West. Until recently most countries concentrated on educating only a small group on the assumption that it was neither necessary nor desirable to provide all men with a knowledge of reading and writing. The emphasis on a free basic education for all took hold within the United States much earlier than in most other countries.

Throughout the decades after the Civil War, when this educational effort was at its height, the United States added to its population tens of millions who had been born overseas and who had come to these shores in adolescence or adulthood, ages

when it was no longer customary to attend school. Some of these immigrants came from English-speaking countries where they had previously attended school. Others of this group had little or no formal education. A much larger number of immigrants came from non-English-speaking countries, many of them without any prior schooling. Although there were some opportunities for both the literate and illiterate immigrant to acquire a basic command over the reading and writing of English, the expanding school system within the United States was primarily addressed to their children.

A second characteristic of the period between the Civil War and World War I was the changed status of the Negro who, although not yet a completely free man, was no longer a slave. The Census of 1870 emphasizes that four out of every five Negroes, ten years of age and over, were illiterate, a ratio vastly greater than that for whites, which was approximately one out of five. This gross disparity in literacy between whites and Negroes at the beginning of the period of marked expansion in free public education is essential for perspective on later developments.

There was a third characteristic of these decades which did much to condition the general trend of educational development. These were the years of rapid industrialization and urbanization, accompanied at first by a relative decline in the numbers of people living on the farm, which in recent times has been transformed into an absolute decline. This pattern of growth was certain to influence and in turn be influenced by educational developments.

In addition to these major forces—large-scale immigration, the transformation of the Negro from slave to freeman, and the increasing urbanization of the country—specific note must be taken of the geographical expanse of the United States and the significant regional differences that tended to persist because of the relative isolation and self-sufficiency of many communities. Clearly, the accommodation of education to society in the post-bellum period was not limited to a single facet. It must be recalled that education in the American tradition has been first and foremost a local responsibility.

There are other aspects of the accommodation of education to society. The educational structure in a modern society is likely

to be characteristically a complex structure which has become differentiated to perform a wide range of functions. Although there may be a significant relationship between the several parts of the structure, spanning as it does grammar school and the most advanced levels of graduate instruction in the sciences and the arts, it is important to make explicit the specific accommodation which is being evaluated. It is one question to ask whether there are adequate numbers of qualified students pursuing graduate instruction to meet the needs of a rapidly advancing technological society and another to explore whether every individual has an opportunity to acquire a basic literacy so that he can meet at least the minimum challenges of work and life.

There are a wide range of accommodations that are possible between a modern educational system and the distinct groups within a modern society which the system serves. This book concentrates on the causes, present picture, and future outcome of a failure in this accommodation which is reflected in the existence of a large number of illiterate citizens despite an elaborate free and compulsory educational system. From many points of view a concentration on this particular aspect of accommodation might seem out of balance for illiteracy has for a long time been a declining problem. Yet we noted earlier, and it is worth emphasizing, that the country's needs for trained manpower to meet its vastly expanded goals are so great that the nation cannot afford to ignore the conditions contributing to lessened performance by individuals because of illiteracy.

It would be well to begin with a clarification of the term illiteracy which, though in common usage, still presents ambiguities. The dictionary defines illiteracy specifically as "an inability to read and write." At first glance, this appears to be clear and simple. But the clarity and simplicity are lost when the question is posed whether the term applies to persons unable to read and write the language of the country in which they reside or whether it refers exclusively to individuals who cannot read or write in any language. This query has an obvious significance for the United States which has been characterized in the past by the immigration of very large numbers of non-English-speaking people.

How does one describe residents of the United States who may be able to read and write their native tongue and yet are unable to understand or speak English? Clearly, the social and economic handicap of not being able to understand or speak the language of the country in which they reside is still more serious for immigrants than inability to read and write that language. It is, furthermore, relatively easy to identify and categorize individuals who are illiterate in the sense that they are completely unable to read or write. It is more difficult, however, to distinguish those who, though not totally illiterate, have only a limited ability to read and write. Is the ability to recognize a few words such as "men," "women," "danger," "fire" to be equated with a knowledge of reading? Further, is the ability to write hesitantly one's own name and address and a few additional words to be considered a minimum knowledge of writing?

For many decades the Census of the United States sought information about the number of illiterates in the population, defining the term as persons unable to read and write in any language. In the Census of 1940, the direct question about literacy was replaced by a question about the number of years of schooling that the individual had completed. The experts had concluded that information about schooling would prove more illuminating and reliable than the earlier question of whether an individual was able to read and write any language. This change in approach by the Census underlines the fact that any study of illiteracy is confronted with difficult problems of conceptualization and definition.

In order to facilitate comparisons between the earlier data and those assembled for the first time in 1940, the Census sought to build a bridge between the two. Through special study the Census discovered that among individuals who had never attended school, the illiteracy rate was 80 percent. In one way or another, one out of every five individuals who had never had any formal schooling had managed to acquire at least a minimum knowledge of reading and writing. Among those who had had at least one year of schooling, the ratio was four out of five; and of those who had completed four years of schooling, nineteen out of twenty were literate. On the basis of this study, the experts concluded that as

a first approximation all individuals who had completed more than four years of schooling could be defined as literate and those with less than five years of schooling could be called "functional illiterates."

There are several obstacles in the way of an attempt to secure statistical information over a period of several decades about the number of individuals who have completed a specified number of years of schooling. For instance, there are significant differences among the states as to what constitutes a school year. In 1940 the school year in Mississippi was 146 days, while in Maryland it comprised 188 days of instruction. Furthermore, there are sizable differences among the states in the amount of absenteeism. In 1948 the average daily attendance in South Carolina amounted to only 82 percent of the total enrolled. In Vermont the comparable figure was 95 percent. These state averages include schools in both rural and urban areas; even wider variation would be found to exist between the attendance record in the rural sections of South Carolina and the urban communities of Vermont. All of these variables are relevant to a consideration of the factors influencing the amount of illiteracy in any particular region. The importance of these factors is even greater if the period under study is extended because the variations today between regions and between states are much smaller than those of fifty or more years ago.

These variations in actual attendance at school are all closely allied to variations in the quality of instruction to which children are exposed. Children who attend school for a relatively small number of days are generally the same children whose education is characterized by poor teachers, poor classrooms, and poor equipment.

A further limitation to data based upon years of schooling completed grows out of the fact that during the past several decades it has become the practice, in an increasing number of schools, to advance a pupil from one grade to the next, irrespective of whether he has mastered the materials in the lower grade. Clearly, it is quite important whether the term, "completed four years of schooling," means that the individual actually acquired the standard amount of knowledge and competence to admit him to

the fifth grade, or whether he remained in school for a four-year period but absorbed little from this experience.

In view of these difficulties of definition and differences in the data, all measures of literacy, particularly those which seek to evaluate trends over a considerable span of time, are at best rough. In particular, these measures fail to distinguish clearly between the illiterate and the semi-literate and between the semi-literate and the person with minimum literacy. However, if the study of social problems were made to depend upon the prior establishment of thoroughly reliable categories, social science would atrophy while the experts struggled with the refinement of concepts and the perfection of statistical measures. The escape from this dilemma, though not easy, has always been known. It consists of compromise and modesty. The analyst must limit the time and effort devoted to preparation of materials; and he must be moderate in presenting his conclusions.

A perspective on the current problem of illiteracy can be gained by reviewing certain major developments in the period since the Civil War, and particularly the trends between 1890 and 1940 for which period the figures are more reliable. Although it has been possible to evolve certain findings from preliminary reports based on the Census of 1950, the last comprehensive studies available are based on the Census of 1940. In the following discussion, all data refer to the population of the age of ten or older. Illiteracy refers to those unable to read or write in any language.

In 1870 the United States contained approximately 5.7 million persons who were classified as illiterate, which resulted in an illiteracy rate of 20 percent. Comparable data for 1950 show a total of 2.5 million illiterates, or approximately 2 percent. This is the first and most important finding that emerges from a study of the trend of the past eighty years. Illiteracy appears to be a residual problem.

A more detailed analysis of the Census of 1870 reveals several interesting characteristics of the illiterate population. Of the total of 5.7 million illiterates, 4.9 million were native-born. The rate of illiteracy of the native-born was approximately 20 percent. Foreign-born illiterates accounted for less than 800,000. The rate of illiteracy among the foreign-born was less than among the

native-born; it amounted to less than 15 percent. However, illiteracy among the native-born was largely a reflection of illiteracy among the Negro population. Just under 50 percent of all the illiterates in the country were Negro (2.8 million), and the rate of illiteracy among the Negroes amounted to 80 percent.

There are other interesting facts about illiteracy in 1870. Although a predominant number of the 800,000 foreign-born illiterates settled in the North, the rate of illiteracy among Northern whites (native- and foreign-born combined) amounted to 8 percent; the percentage of Southern whites was almost three times as large. In light of the differences in the country of origin of immigrants in the middle and end of the nineteenth century, it is important to note that in 1870 more than half of the total number of foreign-born had immigrated from English-speaking countries, Great Britain, Ireland, Canada, and Newfoundland. In 1940 immigrants from English-speaking countries accounted for less than a quarter of the total foreign-born.

The great number of illiterates—2.8 million—among the Negro population in 1870 was a reflection in the first instance of the practices which prevailed in the South prior to the Civil War. At that time law and custom militated against the education of the Negro population, even against teaching Negroes to read and write. By 1940, however, the number of illiterate Negroes had dropped to 1.2 million. The significance of this decline is heightened since, during this period, the Negro population had increased rapidly. The decline in the rates of illiteracy was tremendous: it went from 80 percent to less than 12 percent. Illiteracy has become increasingly a residual problem because of the transformation of the Negro group from an overwhelmingly illiterate to an overwhelmingly literate population.

More detailed data for the period 1890 and 1940 are presented in the accompanying table for each of the three major components of the population—native-white, foreign-born white, and Negro—as well as for the total population.

Although the population of the United States more than doubled during this period, the number of illiterates was cut in half. In 1890 about one out of every seven persons was illiterate. At the outbreak of World War II the figure had shrunk to about one in

thirty. Although the number of illiterates among the native white population had also been cut in half by 1940, there were still almost a million native-born white illiterates. The very heavy immigration from non-English-speaking countries in the period 1890 to World War I caused an actual increase in the number of foreign-born illiterates between 1890 and 1920, after which there was a decline. While there had been almost twice as many native-born white as foreign-born illiterates in 1890, the two groups were, in absolute terms, approximately equal in 1940.

MAJOR GROUPS OF ILLITERATES, 1890–1940

	Total		*Native-born White*		*Foreign-born White*		*Negro*	
YEAR	NUMBER	PER-CENT	NUMBER	PER-CENT	NUMBER	PER-CENT	NUMBER	PER-CENT
1890	6,325,000	13.3	2,065,000	6.2	1,148,000	13.1	3,112,000	56.8
1900	6,180,000	10.7	1,914,000	4.6	1,287,000	12.9	2,979,000	44.5
1910	5,516,000	7.7	1,534,000	3.0	1,650,000	12.7	2,332,000	30.4
1920	4,916,000	6.0	1,239,000	2.0	1,760,000	13.1	1,917,000	23.0
1930	4,284,000	4.3	1,103,000	1.5	1,304,000	9.9	1,877,000	17.5
1940	3,249,000	2.9	983,000	1.1	1,025,000	9.0	1,241,000	11.5

However, on a percentage basis nine out of every 100 foreign-born were illiterate, while this was true only of one out of every 100 native-born persons. During these fifty years the number of Negro illiterates declined from slightly more than 3 million to slightly more than one million. This was the outstanding change that took place. In 1890 more than half of the Negro population was illiterate, while in 1940 only one in ten could not read or write.

The change in the relative importance of the major component groups during these fifty years is also brought out in the accompanying table. In 1890 Negroes accounted for approximately half of all illiterates in the country; the native-born whites, for a third; and the foreign-born, for a sixth. In 1940 the Negroes accounted for only slightly more than a third, while the native-born and the foreign-born each accounted for slightly under a third.

The analysis up to this point has presented illiteracy as the inability to read and write in any language. During this period more than 20 million immigrants were admitted to the United States, the majority from non-English-speaking countries. The

Census of 1930 indicates more than a million foreign-born whites from each of the following countries: Italy, Poland, Russia, and Germany; and between a quarter of a million and half a million from Czechoslovakia, Hungary, Austria, and the French-speaking provinces of Canada. A considerable number of these persons were accounted literate because they were able to read and write in their native language, although it is known that many were unable to read and write English.

Two additional observations are in order before leaving the subject of the relation between immigration and illiteracy. The number of immigrants admitted since the end of World War I, particularly since 1930, has been a mere trickle compared to the heavy immigration in the decades immediately preceding World War I. Thus, the foreign-born illiterates tabulated in 1940 were for the most part older persons who had come to the United States just prior to or just after the turn of the century. As far as the foreign-born European immigrant is concerned, illiteracy is disappearing as he disappears.

A minor increase in illiteracy has resulted from the somewhat expanded immigration from Mexico and neighboring countries. In 1930 of the almost 600,000 foreign-born Mexicans in the United States, more than 300,000 were unable even to speak English.

So far we have analyzed the major trends in illiteracy as reflected in Census data based on the ability of individuals to read and write in any language. We noted earlier, however, that the Census now believes that an evaluation of the problem of illiteracy and the related problems of semi-literacy can best be illuminated through a study of the years of schooling that individuals have completed. The accompanying table presents the number of children per 1,000 of ages ten through fourteen still enrolled in school, by region.

In 1890 approximately 15 percent of the white children and almost 50 percent of the Negro children in the age group ten through fourteen were no longer in school. Marked improvement was noticeable by 1910, when less than 10 percent of the white children but still more than 30 percent of the Negro children had left school. The most striking gain occurred during the next

generation, especially in the case of Negroes. In 1930 only 3 percent of the white children and less than 11 percent of the Negro children were out of school. At first glance the 1940 figures are difficult to interpret for they show an actual deterioration in the white rate, with about 5 percent out of school as compared with the 3 percent in 1930. The explanation can probably be found in a combination of circumstances, among which are the serious weakening in the educational system that occurred in many backward economic areas during the major depression of the 1930's and the budding mobilization boom, which was already under way in 1940. However, the Negro attendance rate continued to improve during the decade, so that in 1940 less than 9 percent were out of school.

SCHOOL ENROLLMENT PER 1,000 CHILDREN, 10–14 YEARS OF AGE

	1890		*1910*		*1930*		*1940*	
REGION	WHITE	NEGRO	WHITE	NEGRO	WHITE	NEGRO	WHITE	NEGRO
Total U.S.	846	517	910	686	970	892	953	911
Northeast	901	849	941	943	983	982	975	968
Middle Atlantic	849	654	925	854	980	962	964	965
Southeast	714	478	833	649	940	869	892	887
Central	904	776	938	881	981	970	969	966
Southwest	766	641	872	802	939	928	944	952
Northwest	907	830	937	916	981	974	970	970
Far West	905	470	940	928	987	984	976	974

A comparison of 1940 with 1890 provides further confirmation that the period as a whole was characterized by a tremendous improvement in the basic education of Negroes and the closing of the gap between them and the white population.

The foregoing table throws into focus an important aspect of illiteracy which has not been emphasized up to this point. The national figures hide very important regional differences. This is true for both white and Negroes. For instance, if we limit our attention to the Northeast and the Southeast, we find that in this age group in 1890 the Southeast had three out of every ten white children out of school, while in the Northeast, there was only one out of ten not in school. Even more striking is the difference between the two regions in the case of Negroes. In the Southeast in 1890 more than half of the age group were not in school; in the Northeast this was so only in the case of one out of six. By

1940 the differences among the various regions of the country had narrowed substantially, although the Southeast still had the lowest rates of attendance for both whites and Negroes.

These regional data in turn obscure significant differences within each region. Some indication of the extent of the differences can be gained from a consideration of the variations in average attendance among the states within each region. Again keeping to this age group, in 1890 the Southeast had an average attendance of 714 out of every 1,000 white children. At the lower extreme was Louisiana with only 590 in attendance. Florida, Mississippi, and Kentucky ranked considerably above the average for the region, while South Carolina, Alabama, North Carolina, and Georgia were considerably below the average. For Negroes the average attendance for the entire Southeast came to 478 per 1,000 children. Once again, Louisiana was the low state, with only 319 in school; and once again, Alabama, Georgia, South Carolina, and North Carolina were below the average.

Since there were more children still in school in every region in 1940 than during the earlier period, the variability among the states was much less than in 1890. The most interesting differences are to be found among the Negro rates. As compared to a regional average of 887 for the Southeast, Mississippi has now become the low state with 832; North Carolina is the high state with 928.

Even the state figures hide more than they reveal. In large part the differences among the states reflect differences in the degree to which the population is concentrated and urbanized. Significantly higher rates for illiteracy are typical of isolated rural communities.

The analysis is complicated, however, by the fact that our population has long been characterized by a very high degree of mobility. Hence, in evaluating Census data that refer to an adult population it is never certain whether the findings can be related to present residence or whether they reflect conditions in another part of the country from which many people have moved. Likewise, it is not certain whether the high rates of illiteracy typical of certain isolated rural communities reflect the movement out of these communities of a considerable number of the better educated persons, although we know that in general people with more

education tend to move more frequently than people with less education.

There is another aspect of internal migration directly related to the distribution of illiterates in various regions of the country. More young people than old people move. Since there has been a constant increase in the opportunities for public education during the past decades, the older persons in the population show a much higher rate of illiteracy than do the younger ones. Hence any substantial migration of the young would leave large pockets of illiterates behind. In addition to the increases in available education, another factor contributing to a higher rate of illiteracy among older persons is the reduction in immigration from non-English-speaking countries. The accompanying table shows the relationship between age and illiteracy.

PERCENT OF ILLITERACY BY AGE GROUPS AND RACE, 1947

AGE GROUP	WHITE	NON-WHITE
Total	1.8	11.0
14–24	0.6	4.4
25–34	0.8	7.2
35–44	1.3	9.7
45–54	2.0	13.8
55–64	4.2	19.1
65 and older	4.9	32.4

The steep increases in the percentage of illiteracy among the non-white population in the upper age groups were foreshadowed in the data presented earlier which showed the very rapid increase in the percentage of the Negro children attending school between 1890 and 1940. Although some individuals succeed in acquiring a basic literacy even though they never attended school, they are in a minority. Hence literacy rates at any point in time are a clue to the quantity and quality of schooling of the preceding decades.

Sex differences in illiteracy among the white population are shown by a special Census study of 1947 to be very slight. The illiteracy rate for males was 1.9 percent, the female rate, 1.7. A much wider discrepancy was found among the non-white population, which had a rate for males of more than 14 percent while the female rate was only slightly in excess of 8 percent.

We are now in a position to summarize the changes which have characterized the problem of illiteracy over the past several decades, particularly since 1890. Beyond question, the most important social development was the expansion of the educational system. In 1890 one out of seven white children and five out of ten Negro children between ten and fourteen years of age were no longer in school. Today practically every child in this age group is still enrolled in school. This was the basic accommodation between education and society during this century.

Hidden within this general trend were important regional differences during the early period, since the school system expanded more readily in the urbanized North than in the rural South. But over the decades, the regional and subregional differences, if not totally eliminated, were greatly reduced.

Illiteracy among the Negroes has also been strikingly reduced during this period, although it has not been totally eliminated. Nevertheless, the outstanding fact germane to the understanding of the decline of illiteracy during these decades has been the reduction of illiteracy among the Negro population. From 57 percent in 1890, the illiteracy rate has declined to 10 percent.

The large-scale changes which occurred in the number and type of immigrants during this period also were found to have a significant influence on the trends of illiteracy. Throughout this period between 9 and 13 percent of the foreign-born whites were illiterate, but since 1920 there has been a steady drop in the number of immigrants. Unless there are major changes in immigration policy, it appears that this facet of the problem will largely disappear in the relatively near future.

In evaluating the distribution of illiterates among various regions and communities in the country, reference was made to the importance of considering the large-scale internal migration which has long characterized this country. The current place of residence of adults who are illiterate does not imply that they are the products of the local school system; they may well be migrants from one or two thousand miles away.

Although the foregoing analysis of the continuing and rather rapid shrinkage of illiteracy, both in absolute and in percentage terms, presents it as a residual problem, it still represents a chal-

lenge to the nation. We have noted that the line between individuals who cannot read or write any language, those who can read and write only a foreign language, and those who have a basic control over the reading and writing of English is not easy to draw. The figures presented in this chapter are minimal, for they represent individuals who are unable to read and write any language. Moreover, we have seen that the line between the totally illiterate and the semi-literate is hard to draw, just as between the semi-literate and the person who possesses a minimum degree of literacy.

Two quite different interpretations could be made of the data presented in this chapter. The constant decline in the number of persons who are unable to read and write could lead the optimist to conclude that, within a relatively few decades, the problem of illiteracy will have disappeared. The counter-question might legitimately be posed whether the United States can afford to rely on such a gradual solution of the problem. We are living in a period of great tension, and our security depends upon the fullest utilization of our basic resources: the men, women, and children who comprise the population.

But even if we were freed from the threat of war, there might still be important grounds for dissatisfaction with a policy of inaction other than the curative processes of time. There is a certain, if still undetermined relation, between the level of education and the ability of a person to discharge his responsibilities as worker and citizen. The illiterate or poorly educated is severely handicapped. The millions who can neither read nor write, or who do so haltingly, represent too large a proportion in our society to permit complacency.

CHAPTER 3

THE UNEDUCATED IN THE ECONOMY

EDUCATION is preparation for life, for work, and for citizenship, including military service. The ability of an individual to manage his life, to play a productive part in the economy, and to participate in the community, in peace and war, are all influenced considerably by the extent to which he has been exposed to and has absorbed the advantages of education. We noted in the first chapter that one of the major forces contributing to the expansion of a free educational system was the belief that only literate men could meet their responsibilities as citizens.

The early proponents of free education also argued their case in terms of the contribution that literacy would make to the productiveness of workers. They pointed out that the ability to read, write, and reckon was important for workers in a technology which was minimizing the importance of brute labor and demanding that the machine tender understand written instructions and be able to calculate simple sums.

The more general conviction, however, gained ground most rapidly after the Civil War. It was widely held that every American was entitled to a basic education and that our democracy could not flourish unless its citizens were sufficiently educated to make intelligently their own decisions and to work efficiently in a complex technology. These propositions appeared to be so self-evident that it did not seem necessary to pay attention to the specific eco-

nomic advantages of literacy. For this reason, few analyses were devoted to developing the relation between education and work performance.

We now know, however, that work is so central to life that it is not possible to evaluate the significance of education for life without focusing specifically on the contribution that education makes to man in his capacity as a worker. As a means of enlarging our perspective on the relation of literacy to life, it is desirable to review the role of the illiterate and the poorly educated in the economy during the past several decades. An understanding of the changing economic role of the uneducated cannot fail to increase our knowledge and understanding of the significance of education for work and life.

In the last chapter we traced some of the major changes which have occurred in the United States in the number and categories of persons who have never gone to school or whose schooling is so minimal that they were for all practical purposes unable to read, write, and reckon. In this chapter we shall continue our study by taking as our point of departure the occupational distribution of the population in 1890 and the identification of the specific sectors of the economy where the uneducated were concentrated. That year was selected because by that date the economic structure of modern industrial America had been clearly established. We shall then compare the situation in 1890 with the current distribution of the employed population and of the uneducated workers. To understand what has happened, during these sixty years, to the opportunities and limitations of the uneducated man for effective participation in the American economy, one must recognize the striking changes which have occurred in the structure and functioning of the economy as displayed by the changing pattern of employment. The necessity of studying an aspect within a matrix is an excellent illustration of a major difficulty which confronts the student of social change. He cannot concentrate solely on the phenomenon in which he is primarily interested—in this case, illiteracy; he must concern himself also with the major changes in the framework of life. To concentrate on the particular without reference to the general is to ignore the fact that the general always has a great influence on the quality of the specific.

In 1890 there were approximately 19 million gainfully occupied male workers. Approximately 14 percent of them, or one out of every seven, were unable to read and write in any language. These 2.5 million illiterates were not distributed proportionately among the different regions and groups in the nation. As might be expected, the totals in the North and the South were strikingly different. Although the male labor forces of the North and the South were about equal in numbers, the South had 1.7 million illiterate workers as compared to only 370,000 in the Northeast. This made the illiteracy rate for gainfully employed males about one out of three in the South as compared to only one out of fifteen in the Northeast.

Again as might be expected, the illiteracy rate among Negro workers, especially in the South, was much higher than that for white workers. Of the few male Negro workers employed outside the South, 350,000—a little less than one-third—were illiterate. The South had 1.8 million male Negro workers, of whom 1.2 million, or 2 out of every 3, were illiterate.

Illiterates were found in almost every sector of the economy in 1890. Even in the executive group between one and two percent were illiterate. Illiterates earned their livelihood as clergymen, government officials, corporation executives, bankers, merchants, building contractors, and in other occupations usually associated with a considerable degree of education. The majority of the illiterates were concentrated, of course, in certain occupations. The accompanying table shows the occupational distribution of illiterate workers in 1890 as compared with the distribution of all workers.

The table indicates that about 70 percent of the illiterates

OCCUPATIONAL DISTRIBUTION OF MALE ILLITERATES, 1890

CLASSIFICATION	WORKERS	ILLITERATES	PERCENT
White collar	2,942,000	37,000	1%
Manufacturing (incl. construction)	4,222,000	313,000	7
Manual (non-manufacturing)	2,396,000	356,000	15
Service	560,000	73,000	13
Farm	8,670,000	1,810,000	21
Total	18,790,000	2,589,000	14%

worked on farms; in fact, about 21 percent of all farmers were illiterate. The comparatively small number of illiterates found in service occupations is more a function of the small number of workers employed than an indication that illiterates found it difficult to meet the demands of this type of work.

The difference between the North and the South in the extent of illiteracy among male workers, noted in the table, was reflected in every occupational classification. For example, only 9 percent of the farmers in the Northeast were illiterate as compared to 39 percent in the South. Perhaps more revealing are the data shown in the accompanying table which indicate the regions and the occupational groups in which illiterates were found in 1890.

OCCUPATIONAL DISTRIBUTION OF MALE ILLITERATES BY REGION, 1890

CLASSIFICATION	TOTAL U.S.	NORTH & WEST	SOUTH
White Collar	1%	1%	0%
Manufacturing	12	7	5
Manual (non-manufacturing and service)	17	9	8
Farm	70	16	54
Total	100%	33%	67%

The illiterate was most likely to be a farmer and especially a Southern farmer, although the white collar group was the only one from which he was almost entirely excluded. The high illiteracy rate among farm workers was even higher among non-whites. Three-quarters of all the non-white male workers were farmers, of whom almost 70 percent were illiterate.

The foreign-born worker undoubtedly constituted an additional educational problem in the labor force of 1890. About 4.3 million male workers had been born outside the country. Almost all of them worked in the North and the West, where they were found in all classifications of jobs, but primarily in manufacturing and farming. Unfortunately, for our purposes, it is impossible to tell from the Census reports exactly how many were illiterate in English since the Census, as previously noted, counted a person as illiterate only if he was unable to read or write in any language. It is estimated, however, that about a sixth could not even speak English, to say nothing of reading and writing it.

This review of illiteracy in the 1890 labor force may now be summarized. One out of every seven male workers was unable to read and write in any language, and an even higher percentage were illiterate in English. The South accounted for two-thirds of these illiterates, although it had less than 30 percent of all the male workers. This regional differential was enhanced by the high percentage of Negroes and farmers in the Southern population. Sixty-four percent of the male Negro workers and 39 percent of the farmers in the South were illiterate, but this is far from the whole story. Even in Southern manufacturing, which was reserved nearly completely for whites, the illiteracy rate was almost 20 percent, more than three times the corresponding rate in the Northeast.

Before comparing the occupational distribution of illiterates in more recent years with the data presented for 1890, it is desirable to indicate the broad changes in the total occupational distribution since 1890. The accompanying table shows the number of male workers employed in the various occupational classifications in 1890, 1940, and 1950. The table shows that the total number of workers more than doubled in these sixty years.

OCCUPATIONAL DISTRIBUTION OF MALE WORKERS

CLASSIFICATION	*1890*		*1940*		*1950*
White Collar		2,942,000		9,517,000	12,467,000
Manual		6,618,000		14,141,000	18,689,000
Manufacturing and Construction	4,222,000		9,077,000		
Non-manufacturing	2,396,000		5,064,000		
Service		560,000		2,085,000	2,332,000
Farm		8,670,000		7,762,000	6,357,000
Occupation not reported				245,000	472,000
Total		18,790,000		33,750,000	40,317,000

Perhaps the most significant fact shown by the table is the steep decline in the percentage of the working force that earned its living by farming. In 1890 more than 40 percent of all male workers were farmers, while in 1950 only about one out of six was so employed. Much of this relative decline was taken up by the expansion in white collar occupations, which accounted for only a sixth of the workers in 1890, but nearly a third in 1950. These trends are extremely important in the present context because they indicate

that occupational opportunities have shrunk in those jobs most frequently held by illiterates and have expanded in those occupations for which literacy is nearly always demanded.

Since illiteracy was in great part a Southern problem in 1890, it is necessary to examine comparable data for the South alone. Occupational trends in the South have paralleled those in the whole nation and in certain respects have gone even further. In 1890, two-thirds of all Southern workers were farmers. In 1950 this was true of only one out of four, as the accompanying table

OCCUPATIONAL DISTRIBUTION OF MALE WORKERS IN THE SOUTH

CLASSIFICATION		*1890*		*1940*	*1950*
White Collar		10%		21%	27%
Manual:		22		35	42
Manufacturing and Construction	13		20		
Non-manufacturing	9		15		
Service		2		5	5
Farm		65		38	25
Occupation not reported		1		1	1
Total		100%		100%	100%

shows. Employment in white collar and non-farm manual jobs has risen steeply; more than one out of four southern workers was in a white collar job and 40 percent earned their living in non-farm manual occupations in 1950. Thus, the South, which has traditionally had many more illiterates to employ than the rest of the country, has also experienced a sharp reduction in the importance of those jobs in which illiterates most frequently find employment.

It is not easy to complete the picture by specifying the changes in literacy since 1890. In 1940 the Census stopped asking the question on literacy and, instead, classified the population according to the number of years of school completed. The lowest category that has been used since is "less than 5 years." Because most people with less than five grades of school would have been counted as literate under the earlier standard, it is not possible to compare directly the number of illiterates in previous censuses with the number completing less than five years of school in 1940 and 1950.

In 1947, however, a Census study on a sample basis estimated the rate of illiteracy among persons who had completed less than five years of school. According to this study, it may be estimated that, of the nearly 4 million male workers who had completed less than five years of schooling in 1940, just under 1.5 million were illiterate. This figure represents a decline of one million since 1890, although the population more than doubled in that period. The illiteracy rate among male workers declined sharply, from 14 percent to 4 percent.

Surprisingly enough, the actual number of illiterate non-farm workers dropped only slightly, from 800,000 in 1890 to 700,000 in 1940. Since, as noted, the total number of illiterate workers dropped by a million during the period, most of the decline in the number of illiterate workers occurred among farmers. In 1890 there were 1.8 milion illiterate farmers, but by 1940, only 800,000. This change of course is not due solely to the reduction in illiteracy among farmers, from 21 percent to 10 percent, but also to the great decline in the percentage of the total population employed on farms.

Unfortunately, it is not possible to estimate from the data on years of school completed the number of illiterates in the different regions or in the different categories of non-farm employment. Our purpose will be served nearly equally well, however, by considering the distribution of persons with less than five years of education, since this distribution undoubtedly parallels closely the distribution of illiterates.

In 1940 just under 4 million men, about 12 percent of the male labor force of 34 million, had completed less than five years of school. By 1948 this number had dropped to 3 million, or only 8 percent. We shall analyze the 1940 figure, however, since the 1948 data cannot be broken down regionally. The accompanying table shows the number of employed males with less than five years of schooling in the United States, and in the South and the Northeast separately.

The South continued to have the majority of the poorly educated and illiterate, approximately 60 percent. Likewise, farm work continued to support more illiterates than any other occupational classification. Forty-four percent of those with little schooling were

employed on farms. This pattern was even more characteristic of the South, where 60 percent of the poorly educated men worked on farms. On a national basis, manufacturing and construction had come to provide considerable employment for this group. Twenty-five percent of those with less than five years of schooling were employed in these industries.

EMPLOYED MALES WITH LESS THAN FIVE YEARS OF SCHOOLING, 1940

CLASSIFICATION	U.S.	SOUTH	NORTHEAST
White Collar	291,000	83,000	120,000
Manufacturing and Construction	1,001,000	398,000	343,000
Manual (non-manufacturing)	648,000	347,000	163,000
Service	263,000	109,000	83,000
Farm	1,764,000	1,417,000	50,000
Occupation not reported	29,000	16,000	7,000
Total	3,996,000	2,370,000	766,000

The following table shows the percent of male workers in each occupation, and in the South and the Northeast separately, who had less than five years of schooling. As in 1890 the Northeast had markedly fewer poorly educated men in each group except in the white collar classification—which is of little importance in this context—and the heaviest incidence was found on Southern farms.

PERCENT OF EMPLOYED MALES WITH LESS THAN FIVE YEARS OF SCHOOLING, BY OCCUPATION AND REGION, 1940

CLASSIFICATION	U.S.	SOUTH	NORTHEAST
Total	12	20	8
White Collar	3	4	4
Manufacturing and Construction	11	19	11
Manual (non-manufacturing)	13	22	11
Service	13	21	11
Farm	23	36	9

The table on page 36 shows the employment pattern for the male non-white workers in 1940, with particular reference to the number and percent with less than five years of schooling.

We saw that in 1890 three out of five Negro workers were illiterate as compared to one out of seven white workers. In 1940

about one out of eight white workers had completed less than five grades of school, while the ratio among Negroes was slightly over two out of five. This indicates a substantial gain in the literacy of the Negro worker, but still leaves a considerable gap between him and his white counterpart. The table shows, also, that many fewer Negroes were earning their livelihood on farms, only two out of five in 1940, as compared with two out of three in 1890. Conversely, more and more Negroes were finding employment in manufacturing. The farm, nevertheless, continued to show the heaviest concentrations of the poorly educated. Three out of every five Negro farmers in 1940 had less than five years of schooling.

OCCUPATIONAL DISTRIBUTION OF EMPLOYED NON-WHITE MALES WITH LESS THAN FIVE YEARS OF SCHOOLING, 1940

CLASSIFICATION	TOTAL NO. OF NON-WHITE MALE WORKERS	NO. WITH LESS THAN FIVE YEARS OF SCHOOLING	PERCENT WITH LESS THAN FIVE YEARS OF SCHOOLING
White Collar	176,000	25,000	14
Manufacturing	662,000	218,000	33
Manual (non-manufacturing)	514,000	216,000	42
Service	449,000	100,000	22
Farm	1,271,000	772,000	61
Occupation not reported	17,000	13,000	76
Total	3,089,000	1,344,000	44

It is worth noting that a declining percentage of the Negro workers are employed in the South. In 1890 the percentage was 84, while by 1950 the South accounted for only 67 percent of male Negro employment. The South continued, nevertheless, to have the largest part of the poorly educated Negro group. In 1940 it still had 90 percent of the total as compared to 92 percent five decades earlier. Half of the Negro workers in the South had less than 5 years of schooling in 1940, as compared to only one out of five Negro workers in the rest of the country.

The broad changes which have taken place in the number and distribution of illiterate and poorly educated persons within the work force during the last half century can now be summarized. The total number of males in the work force increased from 19

million to 34 million between 1890 and 1940, while the number of illiterates declined from 2.6 million to 1.5 million. This change represented a decrease in the rate of illiteracy among male workers from 14 to 4 percent. Nevertheless, there were, in 1948, 3 million males in the labor force who had not completed five years of school, about one out of every twelve.

Farming declined rapidly as a field of employment during these decades, and consequently provided employment for a decreased percentage of the nation's poorly educated manpower. The biggest compensatory gain was in the increased percentage of the poorly educated who earned their living doing manual work, either in manufacturing or in non-manufacturing industries.

The regional distribution of the poorly educated also underwent some changes. In 1890 the South had two-thirds of all the illiterate male workers; in 1940 they had a slightly smaller percentage of the employed males with less than five years of schooling, about 60 percent. Correspondingly, the illiteracy rate in 1890 for the South was 32 percent as compared with the national average of 14 percent. In 1950 20 percent in the South had completed less than five years of school, compared with 12 percent in the whole country.

The relative improvements in the educational level of the male labor force in the South was to an important degree a reflection of the improvements that were made in educational facilities for Negroes. Another vital factor, however, was the migration of large numbers of Negroes to other sections of the country.

By means of the data presented in this chapter, we have attempted to indicate the changing magnitude and locus of the problem of the poorly educated in the national economy. These data provide the raw materials for analyzing the relationship between education, especially the lack thereof, and work performance. These relations are illuminated in Part II, where we consider the performance of the poorly educated citizen as soldier and worker.

CHAPTER 4

THE SCALE OF ILLITERACY IN WORLD WAR II

EVIDENCE HAS BEEN PRESENTED in the preceding chapters which indicates that since 1890 important changes have been made in the educational structure of the United States to insure that a basic education is available to everyone. Despite this improvement in educational facilities, however, the Census of 1940 revealed that approximately 4 million males in the working force had less than five years of schooling. Approximately 1.5 million of these poorly educated were in the age group eighteen through forty-four—the range which includes the men liable for military service.

The vast majority of these illiterate and poorly educated persons in the population had somehow adjusted to life—they were able to secure employment, discharge familial responsibilities, and participate in community activities. This contention cannot be supported positively as easily as it can be by the absence of contradictory evidence. In our democratic society extreme maladjustment is expressed in one of two ways: some individuals, unable to discharge their responsibilities through their own efforts, seek assistance from the community; others run counter to the rules and regulations of the community, which then intervenes to apprehend and punish them. There is no significant evidence to indicate that the illiterate and poorly educated presented either symptom of maladjustment. They were making an adjustment to life, as workers and citizens, however much the level of their adjustment was adversely affected by their lack of formal schooling.

A new fact of community life has developed, however, that has necessitated the evaluation of such precarious individual adjustments in a broader light. Modern wars cannot be fought and won without the total involvement of all members of a society, or without the redirection of the nation's resources to the ends of war. Among the consequences, therefore, of a national emergency is the new perspective which is placed upon many aspects of a nation's life, some of which may have escaped recognition or evaluation during a more placid period. Although the experts in education had been aware of the existence of large numbers of individuals in the population whose ability to read, write, and reckon was totally non-existent or minimal, there had been no widespread concern with the problem of illiteracy in the pre-war years. The only significant attempt to remedy the lack of schooling and the lack of literacy among young adults, even as late as the 1930's, was the basic instruction provided by the Civilian Conservation Corps and the Works Progress Administration. It was the large-scale screening of the younger male population consequent to the passage of the Selective Service Act of 1940 that turned a local and isolated fact into a national problem.

Between 1940 and the late summer of 1945, when Japan surrendered, the Selective Service System held six registrations. Men within various age brackets were required to answer a series of questions devised to aid local boards in determining whether individuals should be classified as available for military service or placed in a deferred category. There were almost 6,500 local Selective Service Boards throughout the United States and prior to V-J Day they had registered more than 22 million persons in the age group eighteen through thirty-seven. The total number registered was greatly in excess of this figure, since the third registration in February, 1942, required men through the age of forty-four to register; the fourth registration, looking forward to the possibility of a total mobilization of the nation's manpower resources, required all men between the ages of forty-five and sixty-five to register.

The basic responsibilities of the local boards were threefold: to register individuals in the liable age group, to classify the registrants, and to meet specific quotas set by the Armed Services. It is

important that although early in the war the local boards did examine and reject some registrants, the vast majority were examined by the military under standards established by the Armed Services.

Although the Armed Services needed very large numbers of men, and although they were convinced that in general the younger the man the better soldier he would make, they did not consider it practical to ask the local boards to forward for induction all men of certain ages. Instead, they established a series of standards which each registrant had to meet. These standards set minimum requirements in terms of physical, mental, emotional, and moral qualifications. Illustrative of the complexities of the screening process is the fact that there were thirty general causes for rejection. Any individual who fell below the minimum standard with respect to any one of these thirty traits or qualities was rejected for military service and classified IV-F.

At the end of the war, the Selective Service System made a count, on the basis of a 20 percent sample, of all men who had been classified IV-F after their initial examination. This enumeration was for the period from the beginning of Selective Service through December, 1944. On the basis of this and other relevant data, we developed the distribution by major cause of rejection of the 5.2 million men in the IV-F pool at the end of the war shown in the accompanying table.

SELECTIVE SERVICE REGISTRANTS, 18–37, CLASSIFIED IV-F, AUGUST, 1945

REASON FOR REJECTION	TOTAL	WHITE	NEGRO
Mental Deficiency	716,000	391,000	325,000
Mental Disease	970,000	855,000	115,000
Physical Defects	3,475,000	2,933,000	542,000
Administrative (moral, etc.)	87,000	71,000	16,000
Total	5,248,000	4,250,000	998,000

Our particular interest centers on the 716,000 men between the ages of eighteen and thirty-seven who were not accepted for military service during World War II because they were adjudged to be "mentally deficient." It is not easy to define even abstractly the

term "mentally deficient." An easy way is to declare that an individual who fails to achieve a specified score on an intelligence test is mentally deficient in that he does not possess the intellectual ability to meet the arbitrary standard. The real question here would be the adequacy of the test and the reasonableness of the standard. It is known, however, that it is difficult, perhaps impossible, to devise a test which takes proper account of the cultural and environmental factors in the individual's background so that his response to questions reflects his intellectual ability and not his specific knowledge of certain words and circumstances.

Another definition, more useful for present purposes, is that a mentally deficient person is one who is unable to meet minimum performance standards as worker and citizen because of a lack of intellectual capacity, rather than because of a physical handicap or emotional disturbance. In our society the inadequate performance which most frequently leads to a suspicion of such mental deficiency arises in pre-school years, when the child is unable to acquire the usual skills for his age, or in the early years of school, when he fails to absorb the instructional materials solely or mainly because of a lack of basic intellectual capacity. A few children are so severely deficient that they must be institutionalized. The vast majority, however, continue for some time in school, some in special classes. Once they are out of school, they merge with the population at large.

Relatively little research has been devoted to ascertaining the number of individuals in the population who cannot meet a minimum performance criterion as workers and citizens. Some authorities estimate that approximately one percent of the population can perform even unskilled work only under close supervision in a protective environment. It is believed that another one percent of the population are able to work effectively only if they have some type of special supervision. According to these estimates the percentage of persons who would not meet a minimum performance standard because of intellectual deficiency would be 2 percent. The more than 700,000 men rejected for military service under the general heading of "mental deficiency" amounted to about 4 percent of the men examined. On the surface this might be taken to mean that the screening standards used were somewhat

tight but approximately correct. Again, however, a national average obscures the truth, for nearly 14 percent were rejected in some states and only one-half of one percent in others. The fact that the national rejection rate was only a little higher than the theoretical rate of true mental deficiency cannot be taken as an indication that the screening validly assessed either mental deficiency or ability to give satisfactory performance. The regional patterning of the rejections indicates that the screening assessed primarily the individual's educational background.

Since the mental screening by the Armed Services during World War II was mainly a measure of educational deprivation, the results of the large-scale examinations are helpful in determining the number and distribution of persons who were so educationally deprived that they were considered unsuitable for military service during the most important war in the country's history. In considering the results, it is important to divide totals between whites and Negroes because educational deprivation has been so much more characteristic of the Negro population. The accompanying table presents a breakdown of the total number of men rejected for mental deficiency by the end of the war.

REJECTIONS FOR MENTAL DEFICIENCY BY REGION AND RACE

REGION	TOTAL	WHITE	NEGRO
New England	20,765	19,803	962
Middle Atlantic	71,416	49,708	21,708
Southeast	435,639	167,599	268,040
Southwest	89,881	70,661	19,220
Central	70,460	57,274	13,186
Northwest	13,089	12,530	559
Far West	15,150	13,725	1,425
Total U.S.	716,400	391,300	325,100

Several conclusions emerge from this tabulation. By far the largest number of rejectees are from the South—the Southeast and the Southwest—which together account for just under three-quarters of the total. At the opposite extreme are New England, the Northwest, and the Far West, which altogether account for only 7 percent. The Middle Atlantic and the Central States each

account for about 10 percent. Furthermore, rejections were usually credited to the region of the rejectee's current residence, rather than to his place of birth or longest residence. There can be little doubt, therefore, that the totals of the Middle Atlantic and Central states were increased by migrants who had moved from the South.

With respect to the Negro population, the Southeast and the Southwest account for an even larger part of the national total—more than 88 percent. The total for whites in the Southwest includes the substantial Latin American population and the Indian population which is fairly heavily concentrated in New Mexico and Arizona.

Even more revealing than the absolute number of persons rejected are the rates per thousand examined. The accompanying table summarizes the experience by region and race.

REJECTION RATES PER THOUSAND REGISTRANTS, BY REGION AND RACE

REGION	TOTAL	WHITE	NEGRO
Total U.S.	40	25	152
New England	17	16	65
Middle Atlantic	15	11	67
Southeast	97	52	202
Southwest	60	54	107
Central	14	12	61
Northwest	14	13	40
Far West	10	9	50

Several striking facts are revealed by this table. First, the rate of rejection in the Southeast is almost ten times as large as that in the Far West. All of the regions of the country except two have a total rejection rate between 10 and 17 per 1,000 examined; the Southeast and the Southwest have rates of 97 and 60, respectively. Although the range is less for the white population, it is still striking. The Far West has a rejection rate of 9 while the Southeast and the Southwest each have a rate of more than 50. The Negro rate is so much larger in every region that it might appear to be a different population; the over-all Negro rate is just over six times the white rate. However, there is evidence within the Negro distribution to suggest that the population is basically parallel.

One finds, for instance, that the rate of rejection for Negroes in the Northwest and the Far West is actually below the white rate in the Southeast and the Southwest. Even in the other three regions—New England, Middle Atlantic, and Central, the Negro rate is only slightly above the white rate in the South. The sixfold difference in total rates between Negroes and Whites results from the exceptionally high rejection rate for Negroes in the Southeast and the lower but still high rate in the Southwest. The most extreme regional and racial differences are between the rejection rate for Whites in the Far West of 9 per 1,000, or less than one percent, and the rate of 202 per 1,000, or more than 20 percent, for Negroes in the Southeast. Unless there were evidence that there are gross differences in mental capacity among various racial and ethnic groups, here is an overwhelming demonstration that the results of the screening examination reflected primarily differences in the educational and environmental opportunities in different regions.

Although similar rejection rates have been tabulated and analyzed by various experts, all of the analyses to date have been limited either to national totals, regional comparisons, or state comparisons. These comparisons shed considerable light upon the problem of the illiterate and the poorly educated youth of the country, but a more thorough understanding of the problem awaited an analysis of smaller geographic units which might bring out the range of specific factors likely to contribute to high or low rejection rates.

On the basis of Selective Service sample data, we prepared two detailed maps. The first presents the rate of rejections for mental deficiency for white registrants in each of the more than 3,000 counties throughout the United States. The second map is necessarily less extensive; it shows the Negro rejection rates for Eastern counties having at least 100 Negroes in our sample. Nearly all other counties in the nation had too few Negroes examined to compute a rate. Exceptions were a few large urban counties.

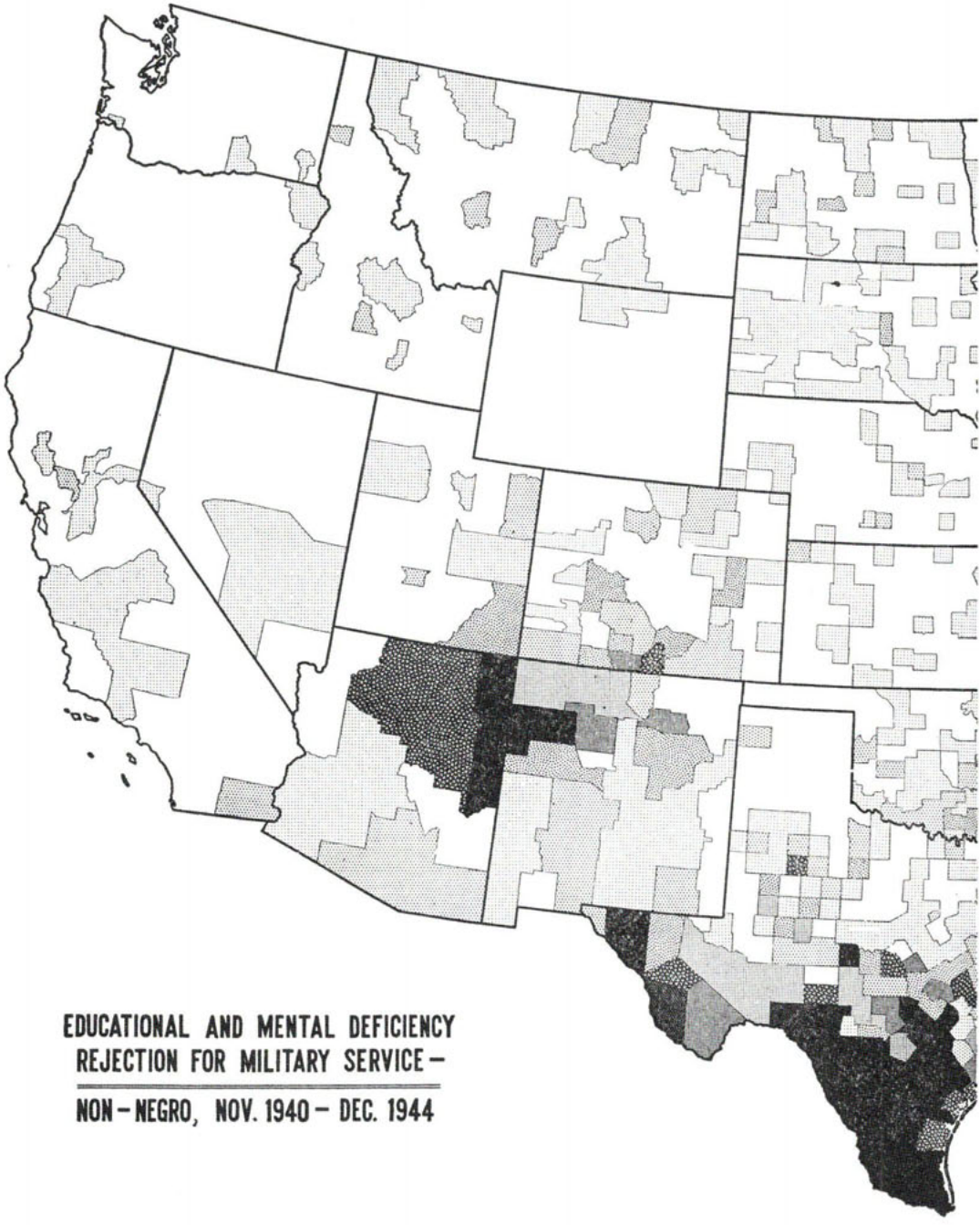
The county map of white rejections facilitates an identification of the major areas of the country in which the rejection rates were either extreme. The highest rates are found in five regions: the Appalachian Mountains, the Ozarks, counties bordering the Gulf

of Mexico, counties bordering the Rio Grande, and the northern parts of Arizona and New Mexico. As we have pointed out, Latin Americans and Indians, being non-Negro, are counted among the white population, which helps to explain the last three areas of high rejection rates.

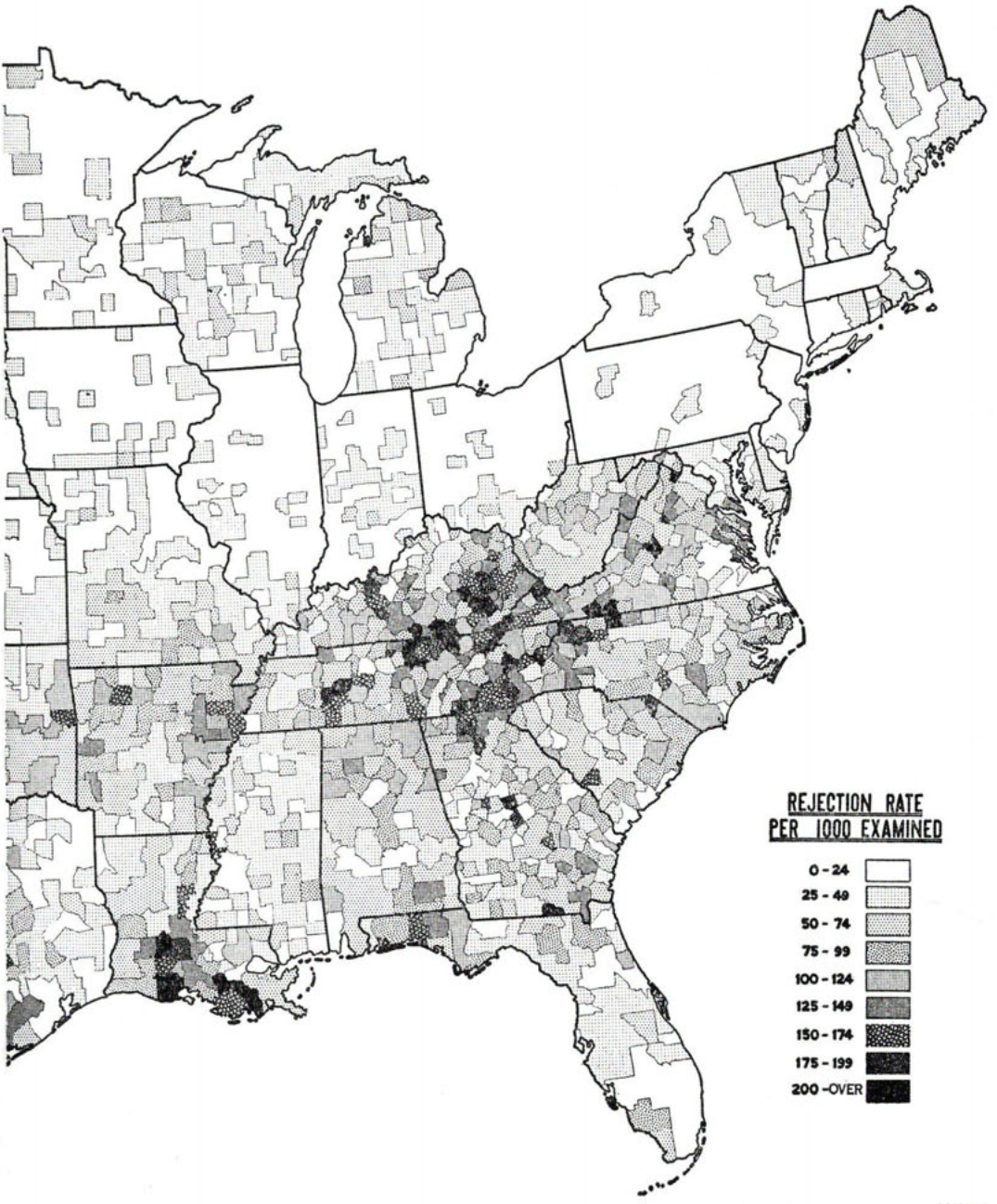
This map also calls attention to relatively high rates in several other parts of the country. These are the northern parts of Maine, New Hampshire, and Vermont which can probably be explained by the considerable numbers of French Canadians resident there; their inability to speak and understand English might have led them to be labeled "mentally deficient." There are several counties in northern Michigan, Wisconsin, North Dakota, and Montana which had high rates. We found that many of these counties were in cut-over timberland country, former mining centers where the ore had thinned out, or isolated, poor farming country.

In the South, which produced by far the greatest number of rejections, a careful inspection of the map indicates the following distinguishing characteristics. The large urban centers, even in a high rejection area, show a considerably lower rejection rate than the adjacent rural areas. The Atlantic coastal region has considerably lower rates than the inland mountain regions. Among the Southeastern states, Mississippi and Florida stand out with conspicuously lower rejection rates. In several states there are sharp distinctions between one section and another, as, for instance, between southern Louisiana (probably because of the Cajuns) and northern Louisiana. Northern and southern Missouri also show a sharp difference, as do eastern and western Oklahoma. Perhaps the most striking intra-state difference is between the north and south of Texas, doubtless because of the concentration of the Latin American group in the southern section.

The most general finding that emerges from the study of rejection rates on a county basis is the general gradation from low to high rates rather than abrupt changes. In a large number of cases this gradualness ignores state boundaries, suggesting that local factors play the predominant part in determining the differential rates. There is, however, contrary evidence which suggests that in some instances state policies are determining. Sharp differences are conspicuous between Mississippi and the bordering states, and



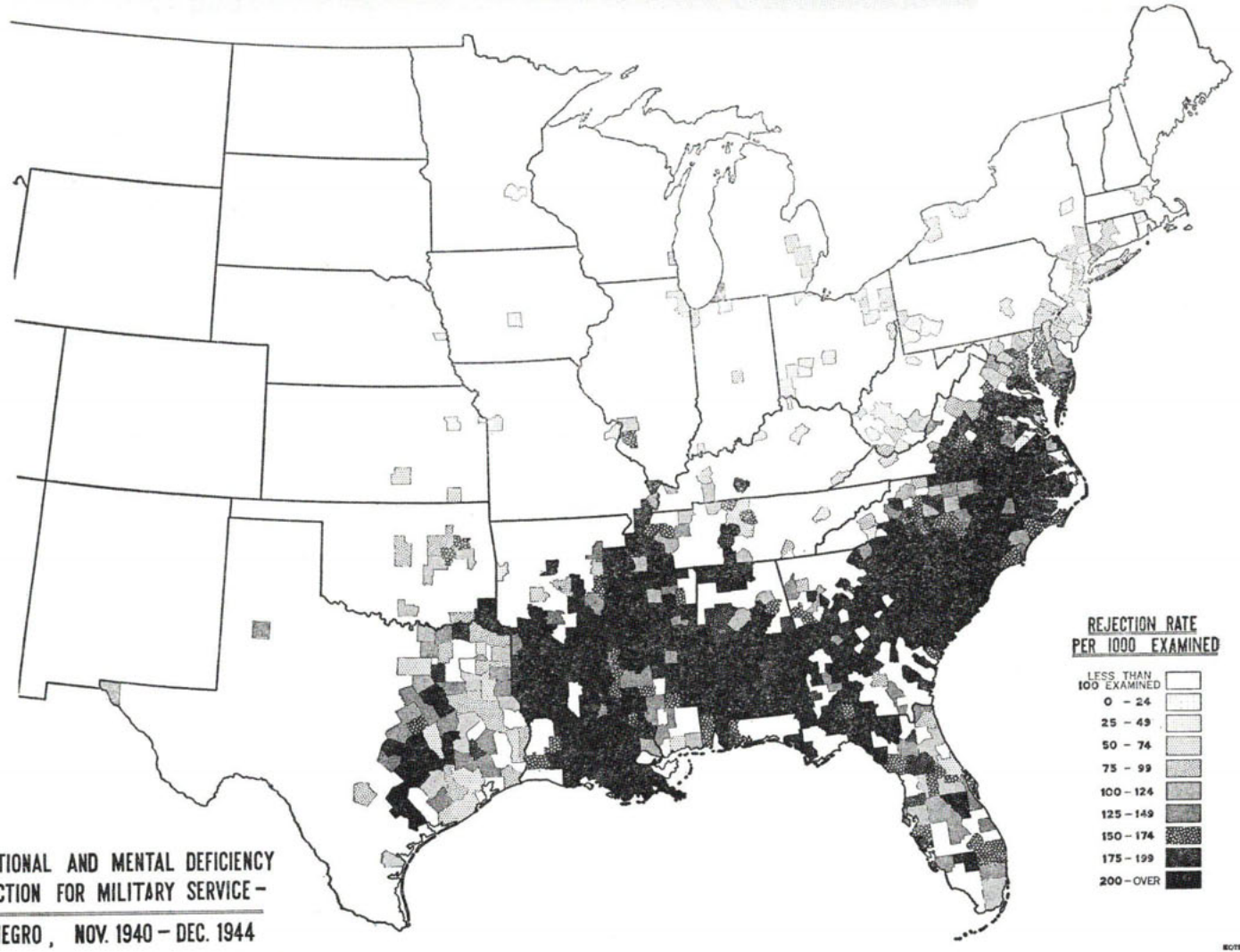
EDUCATIONAL AND MENTAL DEFICIENCY
REJECTION FOR MILITARY SERVICE –
NON – NEGRO, NOV. 1940 – DEC. 1944


REJECTION RATE
PER 1000 EXAMINED
0 - 24
25 - 49
50 - 74
75 - 99
100 - 124
125 - 149
150 - 174
175 - 199
200 -OVER
KOTSCHAR

between the western and northwestern counties of Texas and the much higher rates in the neighboring states. Much the same contrast is observed between the higher rates in West Virginia and those in the border counties of Ohio and Pennsylvania, and in the border counties of Kentucky and Virginia.

The map of county rejection rates for Negro registrants in the Southeast helps to bring certain generalizations to the surface. An outstanding fact is that every county in South Carolina, without exception, had a Negro rejection rate of 175 per 1,000 or more. The situation in Alabama was little better. The counties in which the cities of Birmingham and Mobile are located show, however, relatively low rates. The other states show greater variation between high, medium, and low county rejection rates. There is no doubt that the degree of urbanization is a major factor related to lower rejection rates of Negroes, just as for whites. On the basis of sample studies, the other two factors which seem frequently to be connected with relatively low rejection rates for Negroes are the economic prosperity of the county and a relatively low proportion of Negroes in the total population. There are, however, a considerable number of counties where such specific factors as local white or Negro leadership, or special efforts by outside groups, such as foundations interested in Negro education, apparently are important. Such factors may be at work where the rejection rate for a particular county or group of counties is low in comparison to others which are broadly similar on an economic and demographic basis.

The broad regional and county outlines of the rates of rejection for "mental deficiency" have been presented. It is now desirable to turn to a state analysis, since some policy actions fall specifically within the scope and competence of states rather than any other unit of government. The map of the country supports the data presented earlier by emphasizing the extent to which high rejection rates for white males were so heavily concentrated in the Southeast and Southwest. In addition, it introduces several new findings. First, it indicates that Florida is a thoroughly atypical Southern state: its rates are similar to many Northern and Central states. Perhaps more significant is the finding that rates for Oklahoma and Mississippi more nearly approximate those which prevail in



EDUCATIONAL AND MENTAL DEFICIENCY
REJECTION FOR MILITARY SERVICE -

NEGRO, NOV. 1940 - DEC. 1944

a number of Northern and Central states than those typical of the Southern states. Kentucky, Tennessee, Texas, and North Carolina have, on the other hand, very high rates. The accompanying table gives the number of white rejectees and the rejection rate per 1,000 whites examined.

NUMBER OF WHITE REGISTRANTS REJECTED FOR MENTAL DEFICIENCY AND RATE PER THOUSAND EXAMINED, BY REGION AND STATE

LOCALITY	NUMBER	RATE PER THOUSAND
New England:	19,800	16
Connecticut	3,500	14
Maine	2,500	20
Massachusetts	9,700	15
New Hampshire	1,400	20
Rhode Island	1,600	15
Vermont	1,100	21
Middle Atlantic:	49,700	11
Delaware	600	18
District of Columbia	300	4
Maryland	4,500	17
New Jersey	5,700	10
New York	15,700	9
Pennsylvania	10,900	8
West Virginia	12,000	42
Southeast:	167,600	52
Alabama	13,900	47
Arkansas	14,300	59
Florida	4,800	21
Georgia	12,700	41
Kentucky	24,600	64
Louisiana	14,100	55
Mississippi	4,700	28
North Carolina	26,700	62
South Carolina	8,300	43
Tennessee	23,400	64
Virginia	20,100	59
Central:	57,300	12
Illinois	9,100	9

NUMBER OF WHITE REGISTRANTS REJECTED FOR MENTAL DEFICIENCY AND RATE PER THOUSAND EXAMINED, BY REGION AND STATE
(*Continued*)

LOCALITY	NUMBER	RATE PER THOUSAND
Indiana	6,600	14
Iowa	3,600	11
Michigan	9,000	13
Minnesota	3,900	11
Missouri	10,300	20
Ohio	8,300	8
Wisconsin	6,500	17
Northwest:	12,500	13
Colorado	2,900	19
Idaho	700	9
Kansas	3,000	14
Montana	900	12
Nebraska	1,800	11
North Dakota	1,200	16
South Dakota	1,100	14
Utah	600	8
Wyoming	300	10
Southwest:	70,700	54
Arizona	4,000	53
New Mexico	4,000	50
Oklahoma	9,000	29
Texas	53,700	63
Far West:	13,700	9
California	11,500	11
Nevada	200	8
Oregon	800	5
Washington	1,200	5

A comparison of the state figures on the rejection of Negro registrants with the map indicates that interesting differences are discernible within the broad generalization that high rejection rates are concentrated in the Southeast and Southwest. For instance, the rejection rates for Oklahoma, Texas, and Kentucky are generally similar to those of important Northern and Central

states to which considerable numbers of Negroes have migrated. Two other Southern states, Florida and Tennessee, have rates that more nearly approximate the rates of Northern states than the very high rates which are found to exist in South Carolina and Louisiana. The accompanying table presents the data both in absolute numbers and in rates.

NUMBER OF NON-WHITE REGISTRANTS REJECTED FOR MENTAL DEFICIENCY AND RATE PER THOUSAND EXAMINED, BY REGION AND STATE

LOCALITY	NUMBER	RATE PER THOUSAND
New England:	1,000	65
Connecticut	600	96
Maine	a	..
Massachusetts	300	47
New Hampshire	a	..
Rhode Island	a	..
Vermont	a	..
Middle Atlantic:	21,000	67
Delaware	700	96
District of Columbia	2,100	58
Maryland	8,200	133
New Jersey	2,800	74
New York	3,300	36
Pennsylvania	3,500	50
West Virginia	1,100	58
Southeast:	268,000	202
Alabama	31,500	214
Arkansas	15,900	212
Florida	16,400	148
Georgia	30,500	206
Kentucky	2,500	73
Louisiana	37,500	247
Mississippi	33,400	205
North Carolina	36,100	209
South Carolina	34,100	277
Tennessee	9,800	120
Virginia	20,300	178

NUMBER OF NON-WHITE REGISTRANTS REJECTED FOR MENTAL DEFICIENCY AND RATE PER THOUSAND EXAMINED, BY REGION AND STATE (*Continued*)

LOCALITY	NUMBER	RATE PER THOUSAND
Central:	13,200	61
Illinois	4,100	70
Indiana	1,000	47
Iowa	100	52
Michigan	2,900	94
Minnesota	*	..
Missouri	2,900	64
Ohio	2,000	38
Wisconsin	200	84
Northwest:	600	40
Colorado	*	..
Idaho	*	..
Kansas	400	42
Montana	*	..
Nebraska	*	..
North Dakota	*	..
South Dakota	*	..
Utah	*	..
Wyoming	*	..
Southwest:	19,200	107
Arizona	300	94
New Mexico	100	99
Oklahoma	2,600	112
Texas	16,200	106
Far West:	1,400	50
California	1,300	50
Nevada	*	..
Oregon	*	..
Washington	*	..

* Under 100 rejected.

The rejection rates for "mental deficiency" were, in general, the result of the quantity and quality of education available in the 1920's and early 1930's. As we shall see later, important changes

have taken place since that time in the economic, social, and educational structure of the South, the source of most of the rejections. Hence, there is little but an historical justification for an exhaustive analysis of the World War II tables of educational rejections. We must, nevertheless, consider at least the major factors underlying the educational inadequacy of three-quarters of a million young men.

In this connection we must recall the findings presented earlier which indicated that in 1930 there were between two and three out of every hundred white children between the ages of ten and fourteen no longer in school; the similar ratio for Negro children was eleven out of every hundred. Unless they had been especially good scholars or had had opportunities after leaving school to acquire certain rudimentary skills, a large percentage of these individuals would have failed the Armed Forces' mental test and been rejected. The foregoing ratios relate to the country as a whole. We know, however, that it was the Southeast that produced the largest number of rejections. In that region, in 1930, there were six white and thirteen Negro children out of every hundred in this age group no longer in school.

A first approximation, and it is only that, of the amount and quality of schooling available in different regions of the country can be obtained by reviewing the annual educational expenditures per pupil. For 1929–30, the range of expenditures of the forty-eight states and the District of Columbia was from just under $32 per pupil to over $137 per pupil. The twelve states with the lowest educational expenditures, up to $55 per pupil, accounted for five out of every seven rejectees. The relation between annual educational expenditures and the rejection rate per thousand examined during World War II is presented in the accompanying table.

This table indicates that the total rejection rate for the states in the fourth quartile was seven times as large as the rate for those in the first quartile. Perhaps the most striking single fact which is revealed by the table is the finding that the rejection rate for Negroes in the twelve states with the lowest educational expenditures was eighteen times as great as that for whites in the states with the highest expenditures. In order not to overelaborate this analysis, no distinction was made between the amount of money

spent on white and Negro pupils. There are, however, marked differences in this ratio, even for states in the same class.

REJECTION RATE PER 1,000 EXAMINED BY STATES, CLASSIFIED ACCORDING TO EDUCATIONAL EXPENDITURES PER PUPIL, 1929–30

DIVISION	TOTAL	WHITE	NEGRO
Total	37	22	155
12 States[a] and D.C. with high educational expenditures ($102.57–$137.55)	13	11	57
12 States[b] with medium high educational expenditures ($92.80–$102.56)	12	11	55
12 States[c] with medium low educational expenditures ($60.00–$92.77)	21	11	80
12 States[d] with low educational expenditures ($31.89–$59.99)	91	54	192

[a] New York, Nevada, California, District of Columbia, Wyoming, New Jersey, Michigan, Colorado, Montana, Massachusetts, Arizona, Oregon, Connecticut.

[b] Illinois, Minnesota, Washington, North Dakota, Iowa, Rhode Island, Ohio, South Dakota, Delaware, Wisconsin, Nebraska, Kansas.

[c] New Hampshire, Indiana, Pennsylvania, Idaho, Vermont, Maryland, New Mexico, Utah, West Virginia, Missouri, Maine, Oklahoma.

[d] Texas, Florida, Louisiana, Kentucky, Virginia, North Carolina, Tennessee, South Carolina, Alabama, Mississippi, Arkansas, Georgia.

Many studies have pointed to the conclusion that there is a close relationship between expenditures for education and per capita income. The relationship does not, however, always obtain. The twelve states with the lowest per capita income in 1929 ($252 to $417) accounted for 380,000 out of the 716,000 total rejections during World War II. This was a smaller percentage than the twelve states with the lowest expenditures on education. As one would expect, the amount of money spent on education is more directly relevant than the average income of the state. It is interesting to note that North Dakota and South Dakota, which ranked in the lowest quartile on a per capita income basis, were in the second quartile in terms of educational expenditures. The table on page 56 summarizes the relationship between rejection rates and per capita income. Once again there are tremendous differ-

ences between Negro rejection rates in the poorest states and white rejection rates in the richest. This time the ratio is 21 to one.

REJECTION RATE PER 1,000 EXAMINED BY STATES, CLASSIFIED ACCORDING TO PER CAPITA INCOME, 1930

DIVISION	TOTAL	WHITE	NEGRO
Total	37	22	155
12 States[a] and D.C. with high per capita income ($745–$1,191)	12	10	56
12 States[b] with medium high per capita income ($574–$713)	20	16	93
12 States[c] with medium low per capita income ($422–$566)	46	35	131
12 States[d] with low per capita income ($252–$417)	96	52	210

[a] District of Columbia, New York, New Jersey, California, Illinois, Delaware, Connecticut, Massachusetts, Rhode Island, Nevada, Pennsylvania, Ohio, Michigan.

[b] Washington, Maryland, Wyoming, New Hampshire, Oregon, Wisconsin, Colorado, Missouri, Montana, Vermont, Indiana, Arizona.

[c] Maine, Minnesota, Nebraska, Iowa, Utah, Kansas, Idaho, Florida, Texas, West Virginia, Oklahoma, Virginia.

[d] South Dakota, Louisiana, North Dakota, New Mexico, Kentucky, Tennessee, Georgia, North Carolina, Alabama, Arkansas, Mississippi, South Carolina.

In discussing the county data presented earlier, reference was made to the obvious relation which existed between the degree of urbanization of a region and the rate of rejection because of educational handicaps. In order to test this relationship, the states were again grouped into four categories. The twelve states with the highest percent of rural population accounted for 309,000 out of the 716,000 total rejections. This is a less distinct relationship than was found to exist between rejection rates and educational expenditures and between the rates and income, but still a substantial one. The table on page 57 shows a clear relationship between rurality and rejection rates. Once again the most extreme difference between urbanized whites and the most rural Negroes presents a ratio of 21 to one.

The extent to which multiple factors determine the educational achievement of a population, rather than any single determinant, even one so important as the financial well-being of the com-

REJECTION RATE PER 1,000 EXAMINED BY STATES, CLASSIFIED ACCORDING TO PERCENT RURAL, 1930

DIVISION	TOTAL	WHITE	NEGRO
Total	37	22	155
12 States[a] and D.C. with low percent rural (0%–42.9%)	13	10	65
12 States[b] with medium low percent rural (43%–59.9%)	34	26	109
12 States[c] with medium high percent rural (60%–68.9%)	58	36	183
12 States[d] with high percent rural (69%–100%)	88	48	209

[a] District of Columbia, Rhode Island, Massachusetts, New York, New Jersey, Illinois, California, Connecticut, Michigan, Ohio, Pennsylvania, Maryland, New Hampshire.

[b] Washington, Indiana, Wisconsin, Utah, Delaware, Florida, Oregon, Missouri, Colorado, Minnesota, Texas, Maine.

[c] Louisiana, Iowa, Kansas, Nevada, Nebraska, Arizona, Tennessee, Oklahoma, Montana, Vermont, Virginia, Wyoming.

[d] Georgia, Kentucky, Idaho, West Virginia, Alabama, North Carolina, New Mexico, South Carolina, Arkansas, South Dakota, Mississippi, North Dakota.

munity, is brought out by the following table. In this instance, rejection rates are shown by income level and by region of the country. It is apparent that there are sizable differences in rejection rates from region to region, even when income differences are taken into account. A part of these differences is doubtless due to such factors as the uneven apportionment of school expenditures in some states between whites and Negroes.

REJECTION RATE PER 1,000 EXAMINED BY REGION AND 1929 PER CAPITA INCOME

REGION	HIGH ($1,191–$745)	MEDIUM-HIGH ($713–$574)	MEDIUM-LOW ($566–$422)	LOW ($417–$252)
New England	15	21	20	..
Middle Atlantic	11	39	43	..
Southeast	..	..	77	100
Southwest	..	54	61	50
Central	12	19	11	..
Northwest	..	16	12	15
Far West	11	5	..	..

There is one concluding observation suggested by the table. In wealthy states a very high percentage of individuals will achieve at least a basic education. The converse is, however, not always true. Some states with low per capita income show a rejection rate comparable to much richer areas. It is clear, nevertheless, that economics has much to do with the conditions underlying the World War II rejections and their alleviation, even though there are important non-economic factors at work.

PART II

MILITARY AND CIVILIAN PERFORMANCE

CHAPTER 5

NATIONAL SECURITY AND THE UNEDUCATED

WE HAVE previously called attention to the fact that although the United States has been sparsely settled compared to other industrial countries of the world, it has not experienced serious manpower shortages. Further, we emphasized the fact that the Armed Services prepared their mobilization plans against the background of the large-scale unemployment of the 1930's, without seriously considering the possibility that manpower would prove a limiting resource in the event of a major war. The manpower policies of the Armed Services during the early part of World War II can be appreciated only in terms of these predispositions. Assuming that their requirements would be considerably below the total number available, the personnel chiefs of the Army and Navy established selection procedures aimed at securing for themselves the better men out of the total pool. Only as the war progressed and they discovered that their assumption about unlimited national manpower reserves was unjustified did the Armed Services adjust their manpower policies.

Since they had not even contemplated the possibility of a shortage in the nation's manpower resources, the Armed Services had devoted relatively little time and effort to developing mechanisms that would result in maximum utilization of their manpower. Consequently, they were forced to improvise a personnel policy to cope with the problems precipitated by the war. It would be

difficult to exaggerate the consequences which flowed from this fact. The frequent changes in regulations, on occasion from one extreme to the other, were characteristic of every phase of personnel policy—selection, assignment, promotion, and separation. The Army, which during World War II included the Air Corps, expanded much faster and further than the Navy; this helps to explain the fluctuation of its personnel policy in comparison to that of the Navy.

The Armed Services did, of course, have a personnel policy when we entered World War II. Certain experiences, particularly those based upon the general mobilization of World War I, had carried over and determined the approaches to mobilization for World War II. This is particularly true with respect to that aspect of policy with which this book is concerned—namely, the determination of mental standards for assessing whether registrants with limited schooling were capable of serving in the Army or the Navy. The use of psychological tests on a large scale was introduced during World War I. As frequently occurs, there was initially a widespread and largely uncritical acceptance of the potentialities of a new approach to human measurement. Errors were made, of course, by both the specialists and the public, in interpreting the World War I test results, but that mobilization experience did bring into sharp relief the limited mental and educational characteristics of large groups in the country.

World War I was the first time in our history that a relatively comprehensive inventory was made of the assets and liabilities of an important age group in the population. The records show that of the almost 5 million men examined for service during World War I approximately 40,000 of them were rejected for "mental deficiency." Initially the criterion used to define mental deficiency was "lack of normal understanding." In the official report of the Surgeon General of the Army on *Defects Found in Drafted Men,* the statement is made that "in general, mental deficiency of the grade of imbecility or below was a ground for unconditional rejection for any military service."

The report of this relatively small total of mentally deficient persons was followed by the alarming finding that "more than one-fourth of the enlisted men who were given mental tests were unable

to read and understand newspapers and write letters home." Although the one-fourth figure is not clear cut, for it includes registrants who were literate in languages other than English, as well as those who failed to meet the administrative requirement of a third-grade education, it emphasized the extremely limited education of a large percentage of this age group in the United States.

We learn from the history of World War I that many of these poorly educated men created a serious problem for the Army. During the latter months of the war and the early months of demobilization, psychological examiners had to report about 8,000 men for discharge because of "mental inferiority." Another 10,000 were recommended for assignment to labor battalions because of low-grade intelligence. Another 10,000 were assigned to "development battalions in order that they might be more carefully observed and given preliminary training to discover, if possible, ways of using them in the Army." During this same period another 46,000 men were tested and found to be below "ten years mental age." In the opinion of Army psychologists, it was "extremely improbable that many of these individuals were worth what it cost the government to maintain, equip, and train them for military service."

The heritage of World War I can be briefly summarized. Some experts believed that the startling deficiencies revealed by the mental tests during the war proved that a substantial part of the American population was below a minimum level of intelligence. Since Negroes had a very high rate of failure on the tests, many contended that Negroes were basically less intelligent than whites. Some experts, however, recognized that the Army tests did not measure "innate intelligence" and that all generalizations, racial or otherwise, with respect to inborn mental traits were beside the point. There was, however, general agreement among psychologists, military leaders, and to some degree, the public, that it was wasteful for the Army to try to make soldiers of individuals who had severe mental handicaps. This basic lesson arising out of our experience in World War I played a large part in determining the approach followed during World War II.

Passing reference must be made to the quality of personnel in the Armed Services between the two wars. By and large, Army

personnel was not a superior group. Many in the enlisted ranks were marginal persons, both with respect to their mental capacity and their emotional stability. The severe depression of the 1930's had enhanced the attractiveness of military service, but the quality of enlisted personnel remained low. Officers, who had little pressure exerted on them, in turn put little pressure on their men. The Army, particularly in the field, was able to tolerate in peacetime a rather low level of general performance. It is not surprising, therefore, that in the initial expansion of 1940, no action was taken to establish high screening standards to control the inflow of new manpower.

During 1940 and early 1941 the Army accepted persons as long as they could understand "simple orders given in the English language." But in contrast to peacetime, the Army was faced with a serious challenge during mobilization. Men had to be trained quickly so that a maximum number could be battle-ready in the shortest possible time. The Army discovered that a great many trainees were finding it difficult to keep up with the training schedules. A man unable to read orders, instructions, and signposts was unquestionably handicapped. In May, 1941, the Army placed a new policy into effect: "No registrant in the Continental United States will be inducted into the military service who does not have the capacity of reading and writing the English language as commonly prescribed for the fourth grade in grammar school." All registrants who had not completed the fourth grade were to be examined prior to induction by tests prescribed by the War Department.

As we have noted, men who had not completed the fourth grade were not automatically excluded from service. The revised policy of May, 1941, had provided for the introduction of special tests for such registrants at local boards and at induction stations. Despite these good intentions, however, the screening of men with minimal education during the latter part of 1941 and the early part of 1942 can be defined only as haphazard. In many induction stations the decision to accept or reject an illiterate or semi-literate registrant was made not on the basis of the objective tests prepared by the War Department but on the quick assessment of a psychiatrist. The following quotation shows that

the Army really wanted to discourage the induction of the poorly educated: "In order that wastage of time, space, and funds may be held to an absolute minimum, it is desirable that every effort be made to carefully select and defer all men of Selective Service age who are mentally sub-marginal."

The increase in Army requirements for personnel during 1942 was so rapid, however, that the first stringencies in the nation's manpower pool became noticeable. Selective Service was forced to limit the grounds for deferment. Married men and even fathers were subject to call. The widespread rejection on grounds of mental inadequacy of otherwise eligible young single men added greatly to the multiple pressures under which local draft boards were operating. Any relaxation of Army policy with respect to the induction of illiterates would have eased their problem. As the high rejections continued, leaders in American education became increasingly vocal about the major opportunity for educating illiterates that was being lost through the failure of the Armed Services to adopt a positive program. These educators contended that a relatively small expenditure would provide the Armed Services with half a million competent young men.

At the same time the South exerted great pressure for a change in policy. The following interchange in a Congressional hearing between Senator Theodore G. Bilbo of Mississippi, and General Joseph T. McNarney, the Deputy Chief of Staff, U.S. Army, in October, 1942, illustrates this:

SENATOR BILBO: In my State, with a population of one half Negro and one half whites . . . the system that you are using now has resulted in taking all the whites to meet the quota and leaving the great majority of the Negroes at home, or they are sent back [from the induction center], because there is the literacy test, and secondly there is the venereal disease. . . . It is resulting in extracting all the white able-bodied men to the Army and leaving the Negroes on our hands. That is the result of the present system and that was the reason that I was anxious that you develop the reservoir of the illiterate class as well as give treatment to the venereal class, so that there would be an equal distribution.

GENERAL MCNARNEY: We are actually using the illiterates and the venereals up to the capacity which we feel we can handle without

unduly handicapping the progress of the war. You must remember that every time we take . . . an illiterate it requires extra training. . . .

Responding to the several pressures, the Army altered its standards during the summer of 1942 to provide that each induction station might accept, each day, illiterates up to a maximum of 10 percent of its quota, the quota limitation to apply separately to white and Negro inductees. From one point of view this was a sizable concession on the part of the Army, for it permitted that a considerable number of illiterates would be taken into the service. On the other hand, that number was bound to fall far short of 10 percent of the total number of inductees in the nation since the quota was placed on each induction station. Many induction stations in the North, the Midwest, and the West would forward relatively few illiterates for the simple reason that the illiteracy rate was low among their registrants. On the other hand, where it was high, as in the South, the quota would provide an automatic check against the inflow of too large a number. When the recommendation was made that the 10 percent quota be applied nationally, the War Department failed to act.

There were many reasons for the Army to proceed cautiously in removing the barriers controlling the inflow of illiterates. Among them was the position of the Navy. Until December, 1942, the Navy had been permitted to secure all its personnel from among volunteers. Many men preferred to serve in the Navy because the risk to life and limb was less and the conditions of service more pleasant. Hence the Navy was able to attract a substantial proportion of the better educated and more intelligent individuals in the draft-eligible group. From the point of view of this study, the more important fact is that the Navy could reject for service individuals who were handicapped. Throughout this period only the Army was forced to absorb marginal personnel who were inducted.

In point of fact the marginal group was concentrated in two branches of the Army. The Chief of Staff of the Army had early determined that the Air Corps was to receive a high precentage of individuals who made superior scores on the Army General Classification Test, and was not to be burdened with a large

number of low-score individuals. The Army Ground Forces and the Army Service Forces, therefore, had to absorb almost the entire marginal group.

By February, 1943, the Selective Service System had been designated by the President as the sole procurement agency for all the Armed Forces. The Navy was now forced to accept men forwarded from the joint induction stations. Because of this change, the Army reduced the daily quota of illiterates that it was willing to accept from 10 percent to 5 percent.

During the time that the quota system had been in effect, the Army had used a series of screens in order to induct the most "intelligent" illiterates. In June, 1943, the Armed Forces agreed to disregard literacy completely as a formal qualification for induction. In place of the fourth-grade standard, which had been more or less in effect for the preceding two years, the Army now agreed to test all individuals who had not completed high school. On the basis of the new procedures those who could not pass a literacy test were given additional tests of mental ability. Those adjudged capable of serving after completion of special training were inducted. In June, 1944, an improved battery of tests was introduced, which gave more promise of accomplishing the basic objective of selecting the best from among the illiterate group.

In June, 1943, the Army also undertook a major reorganization of the special training program. This program had been conducted for some time for the purpose of raising the level of marginal personnel so that they could absorb regular training. Several months before Pearl Harbor, the Secretary of War had directed the establishment of special training units at various centers

for the training of the individuals who, by reason of mental attitude or capacity, lack of ability to understand or speak the English language, inability to read and write, lack of common knowledge, or other deficiency are not immediately suited to undertake the regular replacement center training course of instruction prescribed for trainees, or who during the regular course of instruction indicate that they require special attention.

The first special training units, however, were local institutions supervised by station commanders. Then special training units

were usually established at the large replacement training centers. But in the latter part of 1942, after the War Department agreed to accept illiterates up to a quota of 10 percent, authority was granted to organize such units in "armies, corps, service commands, divisions and field units," to meet the needs of illiterates who were being sent directly to these organizations. Just prior to the reform of June, 1943, there were 239 special training units in operation, varying in strength from as few as five trainees to a full battalion of more than 1,000 men. At this time the instructional staff was composed primarily of local officers and enlisted personnel, supported by only a few civilian teachers.

The efforts of these special training units were handicapped by the lack of central direction, by the paucity of competent civilian instuctors, and by the heterogeneity of the trainees. Although the illiterates formed the largest group, approximately 60 percent, sizable numbers of non-English-speaking soldiers, literate soldiers who were very slow learners, and physically handicapped and emotionally unstable soldiers were found in most units.

Perhaps the most serious limitation of all was the fact that the Army Ground Force organizations, which had responsibility for the largest segment of the program, were ill-equipped to carry out their responsibility because of the pressures of their regular training mission. Understandably, the Commanders of these Ground Force organizations were loath to spare the personnel and other resources to improve the potential performance of a marginal group.

When the selection procedure was altered in June, 1943, and illiteracy per se was no longer a bar to induction, a major alteration was introduced into the structure of the special training units. From this point on, it is preferable to speak of them in capital letters, for they were transformed into an efficient school system. As we have noted, the Army, in waiving the quota on the induction of illiterates, did not remove all screens. Men failing the literacy test at induction were given one or more additional tests designed to select those who might be expected to be usable after not more than twelve weeks of special training.

First of all, the reform program of June, 1943, consolidated a large number of small units into twenty-four large Special Train-

ing Units. All of these new Units were established at reception centers. Thenceforth it was possible to send an illiterate soldier for special instruction and indoctrination immediately after his initial processing, rather than losing him for several weeks in the pipeline.

In addition to those formally classified as illiterate were the men who scored low, Group V, on the Army General Classification Test. These men were considered "slow learners," but in reality were mainly those who had had only a little more education than those called illiterate. The Units thus had to deal with only these two related groups; men with physical handicaps or emotional instability were no longer sent to the Special Training Units. The non-English speaking person who was illiterate even in his native language remained, however, a minor but difficult problem, for he was frequently mixed in with the native-born for special instruction.

In the spring of 1944 a major effort was made to hire a considerable number of qualified civilian instructors, a move that contributed much to the eventual success of the program. The Special Training Program had a twofold objective. It afforded the Army an opportunity to observe a soldier during the initial period following his induction to determine whether he could acquire basic literacy or improve his capacity to absorb instruction. Some would doubtless have to be weeded out. For the rest, the program aimed to prepare them as quickly as possible to pursue regular training and take their place in the Army. Samuel Goldberg, one of the leading authorities on the program, identified the specific aims in these terms:

1. To teach the men to read at least at a fourth-grade level so that they would be able to comprehend bulletins, written orders and directives, and basic Army publications
2. To give the men sufficient language skill so that they would be able to use and understand the everyday oral and written language necessary for getting along with officers and men
3. To teach the men to do number work at a fourth-grade level, so that they could understand their pay accounts and laundry bills, conduct their business in the PX, and perform in other situations requiring arithmetic skill

4. To facilitate the adjustment of the men to military training and Army life

5. To enable the men to understand in a general way why it was necessary for this country to fight a war against Germany, Japan, and Italy

The Special Training Units had four grades. Efforts were made to assign men initially to the appropriate grade and to advance them as quickly as possible so that they might graduate from the Unit and be assigned to a regular army training organization in the shortest possible time. This flexibility in assignment, instruction, and graduation was a major strength of the program. It was reflected in the fact that, although the course ran for 120 days, approximately 40 percent of the men graduated in less than 30 days. Almost 80 percent graduated in less than 60 days. Only a very few, less than 11,000 out of 255,000 graduates, remained in a special Training Unit more than 90 days.

The following excerpt from the History of the Special Training Unit, 1747 Service Command Unit, Fort Riley, Kansas (a consolidation of the special training units at Fort Leavenworth, Kansas, and Fort Sheridan, Illinois), which served the entire Midwest, gives a picture of the operation of an efficient Special Training Unit:

When a man first comes to the organization, he is temporarily assigned to Company C, the Receiving Company, where his "processing," already begun at the induction station, is continued. A series of tests are administered to determine the level of training to which the individual may be subjected. It has been found that men classified "illiterate" may be of several levels, and with that in mind, the several companies of the Unit are organized and equipped to take men falling into one particular level. The levels that have been established are classified as I, II, III, IV, progressing in that order from the lowest to the highest and comparable to the first grade through the fourth grade of school.

During the period of training, all men are given periodic tests to determine their academic advancement and careful progress record cards are maintained at all times on each man. The tests mentioned are standard War Department publications covering the academic subjects taught. These subjects are Reading, Language Expression,

and Arithmetic. Language Expression includes reading and writing incorporated into the process of orientation and adaption to military life. War Department texts are also in use, among them the "Army Reader" and the "Army Arithmetic." The former is divided into four parts, each upon completion, followed by the appropriate test mentioned above. A fictional character, Private Pete, is followed through his military career and the entire course is designed along a functional level. It has been found that men will retain a great deal more if they are taught that "one man had four apples and another man gave him four more apples so that the first man then had eight apples," rather than four and four are eight.

The length of time spent in training in the Special Unit varies with the level of the man when he starts. Those having been determined as falling into Group I and II spent on an average of 4 to 6 weeks in the Unit, the lower levels requiring from 8 to 12 weeks of training.

Together with the basic academic training that the men receive while in the Unit, they are also given training in the basic military subjects, information they must know in order to fit themselves into military life and to help them adjust themselves to their new surroundings. Many of these courses will be repeated and more thoroughly covered at the Training Centers to which the men will go when they have completed their training here, but they will have the fundamentals so that they will be able to keep up with regular trainees. The emphasis in the STU, however, rests on the academic with approximately two hours of academic training to one of military.

A "cadre" or staff of enlisted personnel form the basis for all instruction in the Special Training Unit. Each man has been selected for the position on the basis of his academic background as well as being a capable military instructor. With but few exceptions, all of the instructors are college graduates, many of them possess Master's degrees and a few holding various Doctor's degrees. Formerly they were connected with civilian school systems, ranging from the elementary through the college level. The unit is staffed by 26 officers qualified both academically and militarily.

Experience has shown that men of the calibre that are received in the Special Training Unit learn more and faster if they are allowed to absorb the training given with the same group of men for the entire period they are here. For that reason, men are assigned to barracks and remain there until they leave. One classroom is set up on each of the two floors of the building and provided with tables, chairs, blackboards, and other instructional aids pertaining to the

type of work being covered. For a short period of time after entrance into the barracks, some men are prone to exhibit shyness due to the fact that they have never associated closely with other men.

Gradually the spirit of teamwork and cooperation are developed and within a few days the men have made an adjustment sufficient to enhance learning. Since changing from one group to another would tend to prolong the period of adjustment, that method is not employed. The military instructor, a Corporal or Sergeant, lives in the barracks with the men, eats with them and works with them and it is rare that he fails to gain the complete confidence of his men almost immediately. The instructor's job lasts 24 hours per day. During the off duty hours much of his time is taken up writing letters for the trainees or giving them advice on their personal problems. Also he will devote considerable time to additional instruction for men who are learning slower than others.

Among all the men received in the Unit, there are those who simply cannot make the needed adjustment to Army life or who are not mentally capable of absorbing training. After the closest supervision has indicated that no further training would be of use, these men may be separated from the service with an honorable discharge. Provisions have also been arranged for the separation of psychiatric cases that appear occasionally. The Unit's own Personnel Consultant, a trained psychologist in civilian life, acts on all cases, psychiatric or otherwise, the former necessitating additional consultation by a neuropsychiatrist.

We have noted that about 255,000 soldiers were graduated from the Special Training Units. This was accomplished from June 1, 1943, through the end of the program in December, 1945. Just under 303,000 men were received for training. Forty-five thousand were discharged from the Army during the course of this training because they were unable to meet the requirements. A small number of men were dropped from the rolls because of transfers to a non-duty status, prolonged periods of hospitalization, absence without leave for extended periods of time, and similar reasons. Thus 85 percent of those who were received into the Units were graduated. The more cautious wording would indicate that their records were so stamped, for it is known that in a limited number of cases men were adjudged capable of giving good service to the Army even though they

were unable to pass the tests. As one expert remarked: "As a result of this procedure, many soldiers, of course, were passed on with their records stamped as 'literate' who, in fact, were no more literate than when they got there in the first place. Statistics were kept on the basis of those who were marked literate, and I can assure you from my experience in seeing men in training centers after they had come from special training units all over the country that the term 'literate' was very, very loosely used." Nevertheless, there is evidence that only a small number—perhaps ten percent—of the graduates were thus loosely accredited.

It would be desirable to determine the total number of illiterates accepted for duty with the Armed Services during World War II. For various reasons, only a rough estimate is possible. In total the Army inducted about 384,000 illiterates, of whom 220,000 were white and 164,000 were Negro. In the Navy, after the program for the training of illiterates was formalized, approximately 20,000 whites and 15,000 Negroes were assigned to Special Training Units. It is known that a considerable number of illiterates were accepted for service in the Navy prior to the establishment of these programs. A very rough estimate might be approximately 15,000 additional, or a total of 50,000 illiterates for the Navy. In short, the grand total for the Armed Services during World War II was approximately 435,000. Since there is no sharp distinction between total illiteracy and semi-literacy, and in turn between semi-literacy and slow learning, there is little point in trying to refine these data further.

In the period between June, 1943, and September, 1945, about 70 percent of the approximately 300,000 persons sent to Special Training Units were classified as illiterate and 30 percent were Grade V. We have noted that throughout the period of the war the Army accepted 384,000 illiterates. The total number of Grade V men, excluding illiterates, can be estimated at 642,000, of whom 379,000 were white and 263,000 were Negro.

During the period between June, 1943, and the end of the war, of the 300,000 illiterates and Grade V men accepted by the Army, 139,000, or more than 45 percent, were Negroes. At first glance this appears to be very high, since Negroes accounted for only

about 10 percent of the total population and were being accepted for service in the Army only up to a quota of 10 percent. However, the figure falls into place when it is recalled that in 1940, of the 1.5 million males between the ages of 18 and 44 who had had less than four years of schooling, 600,000, or 40 percent, were Negroes.

Up to this point only brief reference has been made to the experience of the Navy. This reflects several factors. In the first place, the Navy did not begin to accept illiterate personnel officially until 1943. It ran only two special training centers, one at Camp Peary, in Williamsburg, Virginia, for white personnel, and one at the Great Lakes Naval Training Station, near Chicago, Illinois, for Negro personnel. The centers were in operation for about a year, from the latter part of 1943 to the end of 1944.

As we have noted, the total number of illiterate personnel accepted for special training by the Navy during World War II probably did not exceed 50,000. Considerable material is available about the training center for Negro personnel in Lieutenant Dennis D. Nelson's book on *The Integration of the Negro in the U.S. Navy*. However, a critical assessment of this experience and results of the training of white illiterates has only recently been undertaken. A further handicap in appraising the Navy experience derives from the fact that the Navy followed a policy of eliminating all evidence of previous illiteracy from a man's record after he had completed special training. In a critical study of literacy training programs, a neglect of the Navy's experience would be serious. In focusing, as this book does, on an assessment of the relation between educational preparation and work performance, the omission of the Navy materials, though regrettable, is not crippling.

More serious are the limitations encountered in reconstructing the role of the uneducated within the Army, which had by far the major problem of training and utilizing them. It is not surprising that during the course of a major war relatively little effort was made to collect information about the characteristics and performance of a group of men whom the Army had accepted only after considerable pressure from civilian groups such as Selective Service, Congress, and educational leaders. The numbers who were

graduated from the Special Training Units were tabulated and forwarded to headquarters. One would anticipate that with a graduation rate of about 85 percent, headquarters would conclude that the program was an outstanding success. But this was not the case. In the absence of comprehensive and reliable information about the later performance of the graduates, it was easy for the skeptics to argue that although the uneducated man could succeed in graduating from the Special Training Unit, he did not in general become an effective soldier. These skeptics could cite many instances to prove that the uneducated man was an "expensive" soldier in the sense that he was frequently absent without leave; would contract venereal disease; would frequently appear on sick call; and, most important, would fail to discharge his duties effectively.

The following paragraphs reflect the thinking more or less prevalent among the staff:

As to the value of the low grade (grade V soldier) to the military service, here again I am afraid there would be difficulty in accumulating actual statistics on the actual value of these people. From my own experience, however, the grade V soldier was of very limited value and then only if distributed in very small numbers throughout different organizations. On one occasion I made a survey of thirteen Military Police battalions which were failing to meet the Inspector General's criteria for training standards for shipment. It was found that the reason for this was that the organization happened to have been loaded down (20 to 30 percent) with grade V soldiers who had been to special training units and coincidentally had gotten assigned to these various battalions. When we gave the battalions relief in replacing a good many of these grade V soldiers, the battalions were able to successfully meet the readiness date for shipment.

Of the low grade soldiers, it appeared to me that those utterly without value were those who, in addition to being grade V's had other personality defects which in themselves may not have been enough for rejection. The mild anxiety reaction type, the soldier with vague psychosomatic complaints, the soldier with a history of delinquency or other social difficulties, the alcoholic, etc., who also was of low grade intelligence, was usually a total failure as far as the service was concerned. These men were herded through induction stations as

well as the special training units because there was no single personality deviation which made them rejectable. But the combination of low grade intelligence together with any of these I have mentioned above caused more difficulty than the man was worth to the service even if you stretched your imagination very, very far.

This negative orientation was reinforced in the immediate post-war years. Rescreening its personnel to meet lowered manpower ceilings, the Army discovered that many soldiers who had remained on active duty after V-J Day were performing very poorly and that a high percentage of these poor performers were men with very limited educational backgrounds. Action was taken, both in the Zone of the Interior and overseas, to separate a considerable number of these men before the termination of their period of service. We referred earlier to the fact that about half of all men rejected for service since Korea fail the mental test. But even at this late date, more than seven years after the end of World War II, little firm knowledge has been accumulated about the actual performance of the uneducated group. The fact remains that tradition, prejudice, impression, and hunches, rather than firm knowledge, are the foundation of current personnel policies with respect to the screening and utilization of the educationally marginal group.

A considerable portion of the personnel records of the millions of Army veterans and the statistical tabulations based on them were destroyed in the immediate post-war years. The army did retain, however, a 5 percent sample of those separated from the service between 1940 and 1946. Moreover, the individual service record of every soldier has been retained, and a considerable number of unit records have been preserved. In order to discover how a representative group of graduates from the Special Training Units actually performed during their later military service, it was necessary for us to build up a roster of names of men who had been assigned to one of the twenty-four major training units which were established after the reform of June, 1943. Although it would have been desirable to have selected the sample on a completely random basis, we were forced to compromise and select men from a relatively few units. We were able to take account of three major variables: the time when the men were inducted, their place of

residence, and their race. We divided our sample of 400 as indicated in the accompanying table.

CLASSIFICATION OF MEN ASSIGNED TO SPECIAL TRAINING UNITS, BY REGION AND RACE

	June–Dec., 1943		*June–Dec., 1944*	
REGION	WHITE	NEGRO	WHITE	NEGRO
Northern	50	50	50	50
Southern	50	50	50	50

The men inducted from the North and border states had gone through the Special Training Unit at Camp Atterbury, Indiana; those from the South were assigned to training units at Camp Shelby, Mississippi in 1943 and Fort Bragg, North Carolina, or Fort Benning, Georgia, in 1944. Without detailing the multiple steps in the sampling process, the eight rosters of fifty names each were developed by making use of the Morning Reports and Payroll Records of the Special Training Units. Since each unit had a class of between 250 and 500, we selected at random every fifth or tenth name.

We developed a history form containing fifty-two items which was completed for each case by the Demobilization Records Center of the Adjutant General's Office in St. Louis, Missouri. Full use was made not only of the information available at St. Louis, but a search was made of supplementary information, such as that contained in the man's medical records which were occasionally in the possession of the Veterans Administration. It is remarkable that reasonably complete records were found for every one of the 400 men on the eight rosters.

The next two chapters, which analyze the military performance of the poorly educated, are based on the detailed materials assembled from these individual personal history forms. These two chapters, together with the third, which is based upon replies to questionnaires from a large percentage of the men about their post-war adjustment, represent the first systematic and detailed analysis of the military performance of the uneducated.

The importance of such a systematic analysis can be demonstrated by reference to a few figures. More than 400,000 illiterates

served within the Armed Forces during World War II. The combined group of illiterates and poorly educated who saw active duty totaled almost 700,000. To this must be added more than 700,000 additional persons, the vast majority of whom were rejected outright for military service because of serious educational deficiencies. In short, the findings which emerge are directly relevant for appraising a group of almost one and one-half million persons out of a total of 18 million registrants who were screened. Clearly we are dealing with a significant sector of the nation's manpower resources.

CHAPTER 6

THE MILITARY PERFORMANCE OF THE UNEDUCATED

ALL THAT has been known about the performance of the more than 300,000 men assigned to Special Training Units is that about 85 percent graduated from the course and entered the mainstream of the Army for training and assignment, while the remaining small group who were unable to absorb the specialized instruction had to be separated from the service. No other information has been available.

Without firm fact at their disposal those in authority were forced to base their judgment of the military performance of the uneducated on snatches of evidence that had come to their attention. The Army's impression of how the graduates of the Special Training Units performed could be summarized in the single word "poorly." The consensus was that the Army's investment in this group was not repaid.

This chapter presents for the first time reliable information about the Army performance of a sizable sample of men assigned to Special Training Units. We are not concerned here with such questions as whether the special training program benefited individuals as workers and citizens when they returned to civilian life. We are concerned solely with the efficiency of their service in World War II. The findings should provide a sounder base than now exists for assessing the Army's experience with the 300,000 men who participated in the program and should also contribute

to evaluating the potential usefulness of the more than 700,000 men rejected for military service because of "mental deficiency."

This chapter is divided into four major parts. Before evaluating the military performance of the Special Training Unit graduates, we shall describe their civilian backgrounds and their adjustment to civilian life. The description of their military performance begins with a comparison of those who were graduated with those who failed to graduate from the Special Training Units. We shall then examine the performance of the graduates in terms of such factors as length of service, foreign service, evidences of distinction, frequency and duration of outpatient treatment or hospitalization, and disciplinary action, including courts-martial, fines, and confinement. Finally, we shall venture a general evaluation of the group including an estimate of the numbers who performed with varying degrees of effectiveness. In the next chapter we shall present case reports of men differing in effectiveness. A later chapter will examine the contribution of the special training program to the post-war adjustment of its graduates.

Our sample, it will be recalled, consisted of 400 men: 200 white and 200 Negro, half drawn from the deep South and half from the border states and the North, half inducted in the latter part of 1943 and the other half in the last six months of 1944. We have analyzed the data to discover whether significant differences could be found to be related to race, region, or date of induction. Where we fail to comment, the analysis did not reveal important differences.

All but three of the 400 men were born in the United States. Since, at the time of the 1940 Census, almost three-fifths of the 1.5 million draft-age men with less than four years of schooling lived in small communities or on farms, it is not surprising to discover that most of our group also came from rural backgrounds. Almost three-fourths were born in communities of under 5,000 population. More than one-third, however, had migrated from their birth places. When inducted, 56 percent lived in communities of under 5,000 population; a little more than a fifth were inducted from cities of more than 100,000.

Slightly under half, 179, were 20 years of age or less when

inducted; 275 were 25 or less; and just under 85 percent of the entire group were 30 or less. Thirty-nine were between the ages of 31 and 35, and 14 between 36 and 38. The median age for the entire group was 21.5 years. The median age of the Negroes, however, was 2.4 years higher than for the whites.

There were no conspicuous differences between the years of school completed by the whites and the Negroes, but the "Northern" group (Camp Atterbury, Indiana) showed a higher average than the "Southern" (Camp Shelby, Mississippi, and Fort Benning, Georgia) group. The men inducted in 1944 also had a higher average number of years of schooling than the group inducted in 1943. The most striking fact about the educational background of the group is that 55 percent had completed more than four years of schooling. Only 3 percent had never attended school. Almost 5 percent had more than eight grades of schooling, and more than 25 percent had reached at least the seventh grade. In light of these facts, it is surprising to find that of the men for whom information was available, 228 were designated as illiterate, while only 69 were classified as literate and sent to special training because of a low score on the Army General Classification Test.

More than half of the group, 226 men, had once been farmers, although less than half were farmers when inducted. Just more than two-thirds of the whites had farming backgrounds, but less than half of the Negroes. Only about a third of the Northern Negroes but almost 80 percent of the Southern whites had been farmers at some time. The accompanying table shows the occupations at the time of induction.

The records suggest that few of the farmers earned more than $15 a week in cash above what they received in kind, and many earned less than $10 per week. The whites in the non-farm group averaged about $28 a week, five dollars more than the Negroes. Both the whites and the Negroes inducted in 1944 earned about five dollars more than the men inducted in 1943. In both the 1943 and the 1944 groups, the Northern whites averaged about ten dollars more than the Southern whites, and the Northern Negroes about six dollars more than Southern Negroes.

About 55 percent of the group were single when inducted. Just

under 40 percent were married. Fourteen men were separated, seven were divorced, and three were widowers.

In 94 percent of the records there was no evidence that the men had ever run into any trouble with law-enforcement authorities.

OCCUPATIONS AT INDUCTION OF MEN ASSIGNED TO SPECIAL TRAINING UNITS

OCCUPATION	*Total*	*White*		*Negro*	
		NORTH	SOUTH	NORTH	SOUTH
Farmer	173	43	60	22	48
Non-farm:					
Laborer	90	22	13	29	26
Janitor, porter, busboy, etc.	36	3	4	21	8
Truck driver, chauffeur, auto mechanic, etc.	44	12	6	15	11
Factory operative	26	11	8	5	2
Coal miner	13	7	2	4	0
Craftsman	7	1	3	0	3
Other	11	1	4	4	2
Total Non-farm	227	57	40	78	52
Grand Total	400	100	100	100	100

In summary, almost all were native-born, and the majority were in their early twenties and came from rural backgrounds. At least one man in four had migrated to a larger community before induction into the Army. Very few had failed to attend school at all, and the majority had gone at least to the fifth grade. One is forced to conclude that the education received was poor and that the men had retained only a small amount of what they had once been taught.

Although more than half of the group were employed as farmers or common laborers at the time of induction, a considerable number were holding semi-skilled jobs, and a few were employed at skilled work. With very few exceptions, these men were self-supporting. Considering their background and education, their earnings were about what might be expected for the kinds of jobs they held.

The fact that almost half were married or had been married reflects the tendency among the rural population of the Southeast toward early marriage. It also indicates, however, that the men

earned enough to assume the responsibilities of the head of a household. It is particularly noteworthy as far as we could tell, that only 6 percent had police records of any kind.

It would appear, then, that the vast majority of these men had made a reasonable adjustment to civilian life. They were economically self-sufficient and socially responsible. This does not deny that the group might have contained a few "floaters." But if account is taken of the background from which they came, the type of education which they received, and the kinds of employment open to them, the civilian adjustment of most of the group must be considered adequate. At least there is no evidence to the contrary.

Of the 400 men, fifty-seven failed to graduate from the Special Training Units. Among them, however, were six men who were withdrawn from the program and discharged from the Army for defects not related to their mental ability, and who, under existing regulations, should not have been accepted at induction. There is no doubt that they were in the Army only because the induction center failed to take account of their obvious disqualifications. Five of them were separated because of physical defects, and one was under age. Of the remaining fifty-one who failed to graduate, four received medical discharges for psychiatric reasons. Two were young Negro soldiers from Ohio who were admitted to the hospital after about a month in the Special Training Unit, one with hysterical symptoms manifested by a bent-over position, the other because of severe headaches which were diagnosed as "psychosomatic." The other two, a young white soldier from Georgia and an older Negro from Florida, were diagnosed as suffering from conversion hysteria, with histories of this condition prior to induction.

Whether these four men should have been accepted by the Army is open to question. They broke down within a few weeks of service, two of them with symptoms which had been present for several years prior to their induction. In any mass-screening operation, however, it is impossible to eliminate all men who might become psychiatric casualties without also excluding from service very large numbers who could make the adjustment if they were accepted. Essentially the same considerations apply to three other non-graduates. One was discharged for enuresis and two for being

below minimum standards for induction. One of these was mentally deficient, and the other suffered from a mixture of physical, emotional, and mental deficiencies.

Men discharged from the Army on medical grounds with a "Certificate of Disability Discharge" were separated "with honor." Many others, such as those adjudged inept and not adaptable for military service, were also separated with honor. In addition to honorable discharges, the Army had two other types: "blue" discharges—without honor, and "yellow" discharges—dishonorable. Blue discharges were given to men who were derelict in the performance of their duty. "Yellow" discharges were given only to those who had committed serious offenses. Among those who failed to graduate from the Special Training Units (in addition to those already considered) was one man who received a "blue" discharge. One other man received a discharge with honor, although his separation was the result of injuries incurred through his own misconduct. The remaining forty-two non-graduates were separated honorably with the notation that they were inept and not adaptable for military service.

Although the vast majority of the non-graduates were discharged because they were inept, a reading of their records makes it clear that a considerable number suffered from emotional disabilities as well. The fact that these men were discharged primarily because of ineptitude means that lack of adaptability for service was probably their predominant, but not necessarily their sole, handicap.

The Special Training Unit course ran for twelve weeks, with an additional four weeks for men who were likely to graduate within that added time. Few of those who were discharged for ineptitude were separated until they had been in a training unit for at least twelve weeks. Many were given individual as well as group instruction. A considerable number, nevertheless, were still in the second and third grades when they were separated from the service. A few were still in the first grade, while one or two had progressed to the fourth grade but seemed unable to reach graduation standards.

Before a man could graduate, he had to pass an examination in reading and arithmetic. A typical question on the reading test was the following:

To do something quickly means to do it

_____ easily
_____ rapidly
_____ quietly
_____ slowly

The arithmetic test involved examples in addition, subtraction, division, and multiplication. A typical question was:

Jim bought 8 stamps that cost 3¢ each. How much did the stamps cost him?

_____12¢ _____8¢ _____18¢ _____24¢

In the opinion of the instructors, most of whom took great pride in their work, the forty-two who failed for ineptness were learning so slowly that they could not possibly pass at the end of even sixteen weeks. There was nothing the Army could do within this reasonable time to make them literate and enable them to proceed with regular training. It is significant that 67 percent of these failures had completed less than four years of school, compared to only 25 percent of the whole group.

Just over 10 percent of the soldiers assigned to Special Training Units were true failures; that is, they were unable to absorb literacy training and were discharged for ineptness rather than for physical, psychiatric, or disciplinary reasons.

Eighty-six percent of all men initially assigned for training successfully completed the course. A few of these failed to pass the final examination but were nevertheless adjudged capable of performing adequately and therefore were retained on active duty.

PERFORMANCE OF MEN ASSIGNED TO SPECIAL TRAINING UNITS

Separations due to screening errors at induction	6	
Medical, disciplinary, and miscellaneous discharges	9	
Discharges due to ineptitude	42	
Total Discharges		57
Graduates		343
Total assigned		400

It would have been easy to evaluate the military performance of the 343 graduates if we had been able to apply performance

criteria developed for the Army as a whole. Unfortunately, no established criteria exist for distinguishing the good from the bad or indifferent soldier. Moreover, the more or less conventional criteria, such as grade, efficiency ratings, and combat record are not fully applicable to this group. A man's grade, among other things, depended upon the length of his service in the Army, and the vacancies in his organization. Half of our group were inducted during the fall of 1944, late in the war. Even those who were inducted in the latter part of 1943 did not complete basic training until early 1944, at which time promotions were more difficult to secure than earlier, when the Army was still expanding rapidly. The Negroes, who constituted half of the sample were especially handicapped for two reasons: they were not assigned to combat, and therefore their organizations did not have frequent vacancies in the higher grades as a result of injuries and deaths; and further, it was customary to assign a considerable number of white non-commissioned officers to Negro units.

Neither are efficiency ratings given enlisted men during World War II of much value. In spite of regulations men were frequently not rated at all; when they were, they were usually given "excellent." Hence only extreme ratings have value in this context.

One of the most important considerations in assessing a soldier's performance, whether he was in combat and for how long, can only be approximated from a study of the surviving records. It must be emphasized, however, that experience in combat is not a relevant criterion for half of our group. With few exceptions, Negroes were not assigned to combat units during World War II.

Because of these limitations, we have placed primary emphasis on the following criteria of performance: on the positive side, the length of service and the type of discharge; on the negative side, the amount of time lost for medical and disciplinary reasons, and whether the man was discharged prior to the normal termination of his period of service. The use of these gross factors, however, was only the first step in our evaluation. We have made use of all available information on grade, efficiency, and combat service in order to refine the assessment. We believe that we can distinguish quite reliably between broad levels of military performance.

Concentrating for the moment on length of service and type of

discharge, the 343 graduates can be divided as follows. Two hundred and fifty-seven were demobilized at the end of the war or reenlisted. Twenty-four were discharged before the normal expiration of their term of service on administrative grounds, primarily because of age or dependency. Many in this group had served for a considerable time. Forty-three received medical discharges, some prior to V-J Day and some after; many had been wounded in combat. The remaining nineteen men must be evaluated as poor soldiers because they were separated prematurely for ineptitude or for serious disciplinary offenses. Four received discharges without honor, and three were dishonorably discharged.

If one disregards that sixty-seven men who were separated on administrative or medical grounds, only 7 percent of the remaining 276 men were clear failures. Closer analysis might show that a considerable number of others performed at a relatively low level, but on the basis of the gross criteria the failure rate was indeed small. How small can best be judged when one contrasts it with the typical judgment of an informed Army officer. More likely than not such an officer would have guessed that one-fourth would fail during basic training; another fourth would be discharged from the Army after basic training because of ineptness; still another fourth would prove to be expensive soldiers because of excessive hospitalization and disciplinary breaches. At best, he would estimate that one-fourth might serve reasonably well.

He would probably estimate that no one in the group would be likely to achieve a grade above private first class, and that probably only one or two men would have contributed anything of note. By the limited criteria we have so far employed, however, the conventional judgment about the performance of the poorly educated is already false. How false it really is can be revealed only after a more careful study of the records of the group.

Two hundred fifty-seven of the 343 graduates repaid the investment in their training, at least to the extent of performing well enough for the Army to keep them until demobilization or until they volunteered and were accepted for reenlistment. Since it was customary throughout the war to retain in the United States men with defects that might interfere with their serving competently abroad, the fact that 76 percent of the 343 men served overseas is

an even more striking sign of the quality of their performance. The 260 men who were sent overseas averaged more than one year of service in a foreign theater. Considering that they were not inducted until late in 1943 or 1944, that they spent three to four months in a Special Training Unit, and another three to four months in basic training, it is clear that they were shipped overseas shortly after completing basic training. They were sent to every theater, but the largest number were assigned to the European Theater of Operations.

Although the evidence so far suggests that the graduates of the Special Training Units performed adequately, in fact much better than most experienced officers would have surmised, a more detailed examination of their records is necessary to indicate just how well they did serve. The type of basic training which they received after graduation from the Special Training Units is summarized in the accompanying table.

ARM OR SERVICE OF GRADUATES FROM SPECIAL TRAINING UNITS

ARM OR SERVICE	TOTAL		WHITE		NEGRO	
Combat Arms:		199		151		48
Infantry	168		124		44	
Other Arms	31		27		4	
Services:		125		20		105
Quartermaster	58		1		57	
Transportation	30		3		27	
Engineers	28		12		16	
Ordnance	5		1		4	
Medical	3		3		0	
Signal	1		0		1	
Station Complement		1		1		0
Air Force		18		1		17
Total graduates		343		173		170

Just under 200 men received combat training, although a much smaller number later participated in combat. This is not surprising because forty-eight of those who received combat training were Negroes. Although there was one Negro combat division in Italy and although Negroes served as voluntary individual replacements

during the Battle of the Bulge, they were not regularly assigned to combat units. Those who saw combat usually did so as members of Negro service units employed in the support of the combat arms.

The accompanying table is the best approximation that we have been able to develop to show the combat exposure of the group.

COMBAT STATISTICS OF GRADUATES FROM SPECIAL TRAINING UNITS

	TOTAL	WHITE	NEGRO
Total graduates	343	173	170
Combat training	199	151	48
Overseas service	260	140	120
At least one battle star	115	66	49
Three or more battle stars or combat medal	47	30	17
Minimum number definitely in combat	41	41	0

Of the 140 whites who served overseas, therefore, slightly less than a third were definitely in combat; and slightly less than half of the group were in a combat area at least long enough to earn one battle star. A man who participated in the landings on Normandy and who continued fighting to the Rhineland might have earned a maximum of four battle stars, one for each of the following campaigns:

Normandy	June 4–July 24, 1944
Northern France	July 25–September 14, 1944
Rhineland	September 15, 1944–March 21, 1945
Ardennes-Alsace	December 16, 1944–January 25, 1945

About 40 percent of the Negroes who went overseas participated in at least one of these campaigns, and seventeen Negroes participated in three.

Further indication of the performance of the graduates is provided by the medals and decorations they earned. Two men were awarded the Silver Star "for gallantry in action." The heroism of Private First Class E. S. M. in the Italian campaign on 27 April 1945 is described in the citation as follows:

At this time PFC E. S. M. was a member of a squad whose mission was to clear an enemy position of a delaying force of Germans in

order to permit the remainder of the platoon to advance. PFC E. S. M., by his intrepid action, quick thinking, and deliberate coolness under fire, killed three and wounded three of the enemy, led to the capture of twenty prisoners, and paved the way for the balance of his platoon to attain their immediate objective. Suddenly he came upon a group of three Germans and quickly fired three shots. The result was two enemy killed and one wounded. Although it was daylight and there was no cover whatsoever, and the Germans in the area had opened fire upon him from all directions, he deliberately exposed himself to those dangers and with determination and boldness moved forward. Three more Germans tried to stem this individual advance, but PFC E. S. M. fired three more well aimed shots and three enemy met the same fate as their comrades. Still under fire of enemy riflemen and machine guns, he surged forward never losing sight of the fact that he had a squad in back of him. PFC E. S. M. encouraged them to move forward as he personally removed each obstacle from their path. This unusual display of outstanding individual initiative and courage so startled the surprised Germans, that the twenty remaining enemy, defending this particular terrain threw up their hands and surrendered. PFC E. S. M.'s heroic and courageous action on this occasion reflect great credit on himself and become the highest traditions of the American soldier.

It is worth noting that when E. S. M. was called for his physical examination prior to induction, the record notes that "registrant claims enuresis, which could not be verified by local board." Shortly before being shipped overseas in July, 1944, there is a notation in his record that he presented himself at sick call because of this same condition, but he was returned to duty with the notation "recommend waking by guard." This indicates how narrowly the Army avoided being deprived of his services, since many men were quickly discharged from the service for enuresis.

In addition to the two soldiers who received Silver Stars, thirty-six others were awarded the Bronze Star Medal, which was given for lesser heroism in action, for especially meritorious non-combatant action, and to men who had earned the Combat Infantryman Badge "for meritorious or exemplary conduct in ground combat against the armed enemy." Four men earned Bronze Arrowheads for participation "in an assault landing, parachute jump, or glider landing into enemy territory." One man earned the Army

Commendation Ribbon for meritorious achievement in non-combatant duties.

Still another measure of the performance of the graduates is the highest rank achieved during the course of service:

Private	105
Private first class	150
Corporal or technician fifth grade	64
Sergeant or technician fourth grade	15
Staff sergeant	9

Twenty-five percent of the entire group achieved the grade of corporal or higher. In light of the fact that these soldiers had entered the Army late, and that half of the group were assigned to non-combat units where the opportunity for promotion was less, this record is good, if not outstanding. It compares with the fact that in June, 1943, approximately 33 percent of the Army's enlisted personnel had achieved two stripes or more, while in June, 1945, this was true for 48 percent.

Although an efficiency rating of "excellent" for a short period of time meant little, it is worthy of note that fourteen men were rated excellent or superior for at least eighteen months after the completion of basic training, and had no rating in their entire record below excellent.

So much for the indices reflecting superior performance. One of the main indications of inferior performance by any group of soldiers is their court-martial record. Of the 343 graduates, 265 never received any type of court-martial; three out of four men, therefore, had no important disciplinary difficulties. The following table summarizes the most serious type of court-martial conviction received by the other 78:

COURT-MARTIAL	TOTAL	WHITE	NEGRO
Summary	48	22	26
Special	25	9	16
General	5	0	5
Total	78	31	47

Sixty percent of those who were tried for some disciplinary infraction were convicted of the relatively minor offenses judged

by a summary court-martial, which could give sentences of only one month's confinement or less. Most of the remaining offenders were tried by a special court-martial, which had jurisdiction over all non-capital offenses, but could not adjudge confinement in excess of six months or forfeiture of more than two-thirds pay for six months. The general court-martial, for very serious offenses, could adjudge any punishment prescribed by the Articles of War, including death. It was the only court-martial which could sentence a man to dishonorable discharge. Five Negro soldiers were found guilty by general courts-martial. One of them, "Being posted as a sentinel, left post without being properly relieved." A second, "Being drunk on guard duty; committed assault and intent to commit sodomy." A third "Did on or about ——, 1944, with intent to do bodily harm, commit assault upon Private First Class E. W. by stabbing him on the shoulder and arm with a dangerous instrument, to wit a boning knife." Another soldier was found guilty of committing assault with a dangerous weapon on four others and, in addition, false swearing and assault and battery. The fifth was found guilty of shooting a Japanese "in the head with pistol" while on occupation duty.

Three of these five men had had previous sentences in civilian life. In one of these cases the Judge had suspended sentence "upon the express condition that the said individual be accepted by the Armed Services of the United States."

A closely related indication of inferior performance is the time that soldiers lost from duty because they had gone absent without leave, had been sentenced to confinement, or were hospitalized as a result of their own misconduct. Army regulations provide that a man must make up at the end of his tour of duty for time lost during his period of service. A total of fifty-seven soldiers lost one week or more, eighteen whites and thirty-nine Negroes.

The Army's belief that the uneducated soldier was an expensive soldier was in part an outgrowth of the conviction that he was likely to be hospitalized frequently. This was clearly not true of the graduates of the Special Training Program. Even though some were wounded in combat, they averaged only 1.3 hospitalizations per man for an average of just under two years of service. This was below the average for the Army as a whole. Only three

soldiers had five or more hospitalizations during their period of service.

A related criterion is the number of times the men reported themselves on sick call. The average for the group for the entire period of their service was 6.4. For the Negroes it was 7.4, and for the whites, 5.4. Disregarding repeated visits for the same condition, we found only six Negroes and two whites who reported themselves on sick call more than once a month.

During the course of the war the Army changed its policy with respect to venereal disease. At one time it held the individual responsible, with the implication that he would be charged for the time lost. At other periods the soldier who contracted venereal disease was treated like any other sick soldier. Nonetheless, from the viewpoint of military efficiency, the Army remained interested in the number of men with venereal disease. Of the 343 soldiers, 270 show no evidence of having contracted any venereal disease while in the service. Seventy-three did, 60 Negroes and 13 whites; most contracted gonorrhea, and many of these soldiers more than once.

It is now possible to assess the performance after graduation from the Special Training Units of the entire group. We have developed a fivefold classification of performance: "very good," "good," "acceptable," "not acceptable," and "non-chargeable" service. Twelve men who were discharged within a year of induction were placed in the last category. As far as we were able to ascertain from a careful study of the records, it is not reasonable to regard the premature discharges of any of these men as evidence of the success of the program. Nine of the twelve were discharged because of serious physical defects such as tuberculosis, ulcers, hypertension, club foot, and pleural adhesions. Only two of these men were specifically discharged as below minimum standards for induction. The other seven received medical discharges, but the records of eight of the nine indicate that their defects were probably present when they were inducted. Of the remaining three non-chargeables, one was killed in a truck accident, one was discharged because of a skull fracture received during basic training, and one was under age for induction.

The following criteria were used to assess the over-all perform-

ance of the remaining 331 chargeable men who graduated from the program. A soldier was rated "very good" if he reached the grade of sergeant and was also awarded a combat decoration, such as the Bronze Star Medal. He was assessed as very good even if he failed to achieve the grade of sergeant if he won an outstanding medal, such as the Silver Star. One soldier who did not serve in combat but who was awarded the Army Commendation Ribbon was also placed in the very good category. No man was considered to have performed as a very good soldier, no matter what his positive qualities were, unless his record was free of serious deficiencies such as disciplinary infractions, excessive hospitalization or outpatient treatment, or short service.

The "good" soldier was one who, regardless of his rank, served for a long period in combat and won the Bronze Star Medal, and whose record was free of negative factors such as serious disciplinary infractions or a serious loss of time due to excessive hospitalization resulting from his own misconduct. Some men were considered to have been good soldiers even though they were convicted by a summary court-martial for a minor offense such as speeding or for having been absent without leave for a very short period. A man who did not serve in combat was judged a good soldier if he achieved the grade of corporal, had two years of service with high efficiency ratings, and had no serious blemishes on his record.

The "acceptable" soldier was one who achieved no rank higher than private first class, whose combat or non-combat record was undistinguished, and who may have lost some time for disciplinary or medical reasons. Many served overseas only short periods or not at all.

The "not acceptable" group included, first, those who were discharged from the Army dishonorably or without honor, and second, those who were separated because of "ineptitude." These two categories accounted for twenty men. In addition, we found that twenty-one others had not performed acceptably. Some were discharged quickly because of mental deficiency or emotional disturbance, which, in the Army's judgment, rendered them useless. Some others who served until demobilization—and one who was

even permitted to reenlist—had never given satisfactory performance. The factors considered in judging these men as not acceptable were excessive time lost from duty, court-martial convictions, excessive hospitalization, and unsatisfactory efficiency ratings.

The following table summarizes the ratings of the 331 men whose performance was assessed:

CLASSIFICATION	TOTAL	WHITE	NEGRO
Very Good	30	21	9
Good	95	60	35
Acceptable	165	71	94
Not Acceptable	41	18	23
Total	331	170	161

Thirteen percent of the 331 men were a loss to the Army in the sense that their performance was of such low order that it had to be adjudged not acceptable. On the other hand, 38 percent of the group were good or very good soldiers, and 49 percent performed acceptably.

Although the number of Negro soldiers whose performance was not acceptable was slightly larger than the number of white soldiers, the more striking fact is that there were more than twice as many white as Negro soldiers who were assessed as very good. This sizable difference is largely a reflection of the Army policy which assigned most Negro soldiers to non-combat duty, since the criteria which we employed were weighted heavily, as they should have been, in favor of combat performance. This gross difference at the upper end of the scale becomes somewhat less important when we realize that 44 Negro soldiers out of 160 were assessed as good or very good, despite their lack of opportunity for combat service.

To recapitulate: Of the 400 men originally assigned to the Special Training Units, 57 were discharged from the Army during the course of their training. Since no screening program can be perfect, it was inevitable that the Army, in its search for intelligent illiterates and slow learners who might profit from special instruction, would accept a certain number who, after trial, would be found lacking. As we have already seen, however, reasonable care at induction would certainly have saved the Army the cost

and trouble connected with six and possibly more of those who failed to graduate. At most, therefore, 51 non-graduates must be charged against the program, as the necessary cost of finding the much larger number who proved themselves capable. In addition, it is necessary to charge against the program the higher cost of the 41 who failed to give acceptable service after their graduation. In summary, 51 men failed early and another 41 failed later, a total of 92; this is a sizable figure until one sets it into perspective by emphasizing that 290 men gave acceptable, good, or very good service. In short, three out of four proved successful. Even more significant is the fact that 125 men, or approximately one in three, gave good or very good service. Clearly the use of the poorly educated during World War II was a success.

To check on the reasonableness of our evaluation of the military performance of the uneducated, the graduates of the Special Training Units were compared with a control group consisting of average soldiers whose education and mentality were sufficient to enable them to enter basic training immediately after induction into the Army. This control group was constructed by selecting the man of the same race whose serial number was next higher than that of each man in the Special Training Unit group. If the man with the next higher number had also been assigned to a Special Training Unit, the man with the nearest higher number was selected. The control sample was not representative of the Army as a whole, but permitted a comparison between men inducted from the same localities who differed primarily with respect to their level of education.

While 26 percent of the 400 Special Training Unit men had less than four years of schooling, this was true of only one percent of the control group. Only 2 percent of the whites and 8 percent of the Negroes in the Special Training Unit group, but 55 percent of the control group had attended high school. Five percent of the control group had attended college. Obviously, there was a significant difference in the educational background of the two groups. With respect to occupational background, the size of the communities in which they had been born, the extent to which they had migrated, and their place of residence at the time when they were

inducted, however, the differences between the two groups were not substantial.

The fifty-seven men who did not graduate from the Special Training Units are not included in the following comparisons. In terms of the reasons for separation from the Army, the differences between the two groups were very slight: 76 percent of the Special Training Unit group and 82 percent of the control group received "favorable" discharges—that is, they were discharged at demobilization, or for reenlistment, or were killed in action, etc. At the opposite extreme, 5.5 percent of the Special Training Unit group, compared to slightly more than 2 percent of the control group, were discharged for such "unfavorable" reasons as ineptitude and undesirability, or were dishonorably discharged. The remainder received discharges that were not related in any clear manner to satisfactory or unsatisfactory performance.

Seven percent of the Special Training Unit group and 20 percent of the control group were sergeants or higher at the time of discharge; 75 percent of the Special Training Unit group and 57 percent of the control group were privates or private first class. Clearly the advantage was with the control group. The control group also included more men who won medals than the Special Training Unit group, 17 percent, compared to 12 percent. However, the two highest awards, both of the Silver Star, went to the Special Training Unit group. With respect to foreign service, there was little to choose between them: 82 percent of the control group and 76 percent of the Special Training Unit group served overseas. More men in the control group won battle stars, however, 35 percent compared to 22 percent.

The control group had a better record than the Special Training Unit group with respect to courts-martial. While 22 percent of the Special Training Unit group were convicted at least once, this was true of only 14 percent of the control group. Moreover, if we include multiple trials of the same man, we find that the Special Training Unit group had a higher rate of special court-martial convictions, eleven per hundred men, compared to 6 per hundred men for the control group, and of general court-martial convictions, 1.4 compared to .5. The control group lost less time, although

the difference was not great. Eighty percent of the control group lost no time at all, compared with 72 percent of the Special Training Unit group. Five percent of the control group and 6 percent of the Special Training Unit group lost fifty days or more.

In order to judge the relative over-all performance of the Special Training Unit and control groups, a summary card was prepared for each man. Care was taken that the cards would contain no hint whether the case was a Special Training Unit graduate or a control case, or whether the man was white or Negro. These cards were then shuffled and sorted into the five groups: very good, good, acceptable, not acceptable, and non-chargeable. The following table gives the results:

MILITARY EFFECTIVENESS OF SPECIAL TRAINING UNIT GRADUATES AND THE CONTROL GROUP

	Total		*White*		*Negro*	
CLASSIFICATION	STU	CONTROL	STU	CONTROL	STU	CONTROL
Very good	9%	23%	12%	26%	5%	20%
Good	28	34	35	40	21	26
Acceptable	48	33	41	25	55	42
Not Acceptable	12	7	10	5	14	10
Non-Chargeable	3	3	2	4	5	2
Total	100%	100%	100%	100%	100%	100%

This objective comparison showed that just under a quarter of the men of the control group were very good, a third were good, another third were acceptable. Only 7 percent of this group were not acceptable, and 3 percent were non-chargeable. Only 9 percent of the men of the Special Training Unit group were very good, but slightly under a third were good, and almost half were acceptable. Twelve percent were not acceptable, and 3 percent were non-chargeable.

This comparison demonstrates conclusively that, granted our criteria, the control group contained many more very good soldiers than the Special Training Unit graduates. One of our criteria, however, was rank, and it is to be expected that those with more pre-service education would more often qualify for higher non-commissioned-officer assignments. It was, in any case, not expected that the Special Training Unit graduates would include a great

many outstanding soldiers. The question was rather whether any appreciable number would perform adequately and represent a clear gain to the Army. This question is answered unequivocally. Eighty-five percent of the graduates performed acceptably or better as compared to 90 percent of the control group. Clearly, at a time when the Armed Forces needed men badly, they were able with a small investment to turn many illiterates and poorly educated men into acceptable soldiers.

CHAPTER 7

SUCCESSFUL AND UNSUCCESSFUL SOLDIERS

IN THE PRECEDING CHAPTERS we have analyzed statistically the background, training, and performance of a sizable group of illiterate men and slow learners who were inducted into the Army in the second half of 1943 or 1944. We have tried to explain the general characteristics of the group as well as the range of differences found among its members. It is difficult to study and evaluate any group, large or small, simple or complex, without relying upon averages. But statistics can never present the full picture. In reducing individuals to numbers and behavior to categories much is gained but much is also lost.

The purpose of this chapter is to supplement the statistical information through summaries of the life history and army experiences of individuals representative of the various categories used in the last chapter. In addition to making the bare figures come to life, this will enable the reader to judge for himself the reasonableness of our generalizations. In research based upon case materials it is always desirable that the reader be given the opportunity to check independently the judgment of the investigator.

THE NON-CHARGEABLE

Some of the men who were sent to Special Training Units, including some who graduated, were found to possess serious disqualifications for military service that were present at the time of induction but were not picked up by the examining physician.

W. E. B., a twenty-nine-year-old white soldier from Kentucky, was one of these. He was inducted in September, 1943, and after spending about ten weeks in the Special Training Unit at Camp Atterbury, Indiana, was assigned for basic training to the Anti-Aircraft Replacement Training Center at Fort Eustis, Virginia. After completing his basic training, he was sent to Camp Stewart, Georgia, late in May, where he was assigned to an anti-aircraft unit for further training. Starting in December, 1943, with a visit to the dispensary at Fort Eustis because of a "pain in chest," Private B. reported on sick call twenty-seven times between December, 1943, and September, 1944. In addition, he had three stays in the hospital: at the end of January because of nasopharyngitis, acute, catarrhal; at the end of June because of pleural adhesions; and again in the middle of July for the same reason. In May the medical authorities at Fort Eustis noted that Private B. had "permanent bronchial asthma" and therefore did not meet induction standards. No action was taken at this point, however, to separate him from the service. After his second hospitalization for pleural adhesions, the Medical Officer at Camp Stewart found him "unfit for overseas assignment." As early as February, 1944, however, a special form had already been filled out disqualifying him for overseas duty. At that time his basic training had been discontinued. Late in April the Medical Officer recommended that he "avoid physical overexertion," but stated that the soldier was qualified for overseas assignment. The first notation that he should go before a board for possible discharge appeared in his record at the end of July, but it was not until the end of September that he was in fact discharged.

Prior to coming into the service, Private B. had married. His last job had been as a "spreader of cloth" in the cutting room of a garment factory, for which he had been paid $17 weekly. Earlier he had worked on a 150-acre farm, where he had raised corn and tobacco, tended cattle, and driven a team of horses. Although he had completed six years of school, his score on the Army General Classification Test at the time of induction was only 57; it was because of this that he was sent to a Special Training Unit. Had the Army been able to assign this soldier to light work, in a reasonably dry environment, it might have succeeded in getting some service out of him. But the evidence accumulated rather

early—as indicated by the soldier's frequent appearance at sick call—that he would be unable to live the life of a field soldier, even if excused from most strenuous duties. From the Army's viewpoint, the major error was the delay in reaching a decision to discharge him. It is rather amusing to note that he was awarded the Good Conduct Medal while awaiting separation.

W. W. S., a young white soldier inducted at Fort Oglethorpe, Georgia, in August, 1943, likewise represents a screening error. Because he made a score of only 64 on the Army General Classification Test, he was sent to the Special Training Unit at Camp Shelby, Mississippi, where he spent almost four months. After being judged literate, he was assigned to an Infantry Training Battalion at Camp Wolters, Texas, where he remained until June, when it became necessary to separate him on medical grounds. His hospital record shows that, while at Shelby, he entered the hospital with a diagnosis of "tuberculosis, pulmonary, minimal, inactive, upper lobe." After three weeks he was returned to duty. Shortly thereafter he was in the hospital again, this time with a diagnosis of "psychoneurosis, anxiety state, mild." Shortly after his arrival at Wolters, he was again in the hospital, this time with a diagnosis of "mental deficient, borderline condition." He was tested and found to have an intelligence quotient of 89, which was high enough to justify returning him to duty. A fortnight later he was back in the hospital again, this time with the original diagnosis of tuberculosis. The outpatient record shows that he was sent into the hospital because he was "spitting up blood."

Prior to his induction Private S. had been employed as a pipe layer for a short period, and before that as a hoist operator. He had earned about $40 a week, but he did not have any record of extended employment in these fields. While in the service he was absent without leave over the Christmas holidays for a period of ten days, and he was subsequently sentenced by a summary court-martial "to be restricted to company area for one month and to forfeit $33 of his pay." The report of a special physical examination made while he was still at Shelby contained the following notations: "He says that his health was good until 1939, when he got measles and pneumonia. He says that since then he has had trouble

with his head, chest, and stomach. . . . At the time he got sick he had been working on odd jobs (construction since), changing jobs frequently because of his health, laying off a considerable part of the time." Here again, the record suggests that the Army was slow in reaching a decision that a chronically sick recruit would fail to make the grade

These cases seem to give support to the Army belief that the poorly educated man was a real military hazard when he also suffered from other defects. Many officers believed that, even though no one of the defects of such a man was clearly disqualifying, all of his handicaps taken together would probably prevent him from performing effectively. But before accepting this theory, logical as it sounds, one must be sure that there were not many other men who, despite other handicaps in addition to their lack of schooling, were able to perform effectively. As always, when dealing with Army records, certain mysteries remain unexplained. It is surely not clear how W. W. S. was diagnosed as mentally deficient one day and given an I.Q. of 89 the next. Nor is it much easier to understand why he should have been hospitalized repeatedly for tuberculosis within a very short period.

THE NOT ACCEPTABLE

From many points of view the individuals whose performance we judged as not acceptable are more important than any other group. Unacceptable performance is always costly to an organization, as well as to the individual, but it becomes a major danger in time of war when a military organization must gain maximum strength in the shortest possible time. There is good reason to study these cases carefully, for there would be a great gain if it were possible to identify the particular qualities of these individuals which contributed to their failure. Such knowledge would then provide one with a sounder basis for developing a future program. It must be recognized, however, that the factors responsible for the behavior of such individuals may not stand out clearly before they are inducted and given a trial.

K. L., a native of North Carolina, was living in Tennessee when

he was inducted in the fall of 1943. He had been employed in a furniture factory, smoothing rough surfaces, and was earning about $34 weekly. At the time of induction it was not disclosed that he had been married three times and had "served time in jails for fighting, drinking, and bastardy charges." He had completed three years of school. He was sent to the Special Training Unit at Camp Shelby, Mississippi, where he spent about a month. Although he was adjudged literate at that time and sent on to the Armored Replacement Training Center at Fort Knox, Kentucky, his record indicates that less than thirty days after he left the Special Training Unit, he was found "unable to read at fourth-grade level." Both the outpatient and hospitalization records show the diagnosis of "alcoholism, acute" on several different occasions. Toward the end of May the soldier went absent without leave for about eight days. The psychiatrist's examination after he was apprehended led to the following report:

This is a 37 year old, well developed soldier, who went AWOL 8 days after finishing his basic training. He was worried about the fact that he could not get an allotment to his child by the first wife, because his 3rd wife, whom he describes as a tramp and who married him under the influence of liquor, is trying to get the allotments. He wants to divorce the woman. The soldier got drunk to drown his sorrows and went AWOL. The EM had a 3rd grade education at 11 years. He has an IQ of 63 and mental age of 10 years. He worked as a logger, farmer and furniture worker.

Recommendations: 1. Average punishment.
2. Suspend sentence.

This soldier was given not one but three chances, but, as was brought out in the testimony before the board which held hearings on whether to separate him, "Anytime he got hold of liquor, he lost all sense." The Army tried to salvage him: "We had to be very careful what kind of a job we picked for him because he does not get along, does not like to take orders from non-commissioned officers. So we gave him an outside job where he does not have non-commissioned officers around." The sergeant directly responsible was "fed up" with him:

This soldier was a very poor soldier. His morals are bad for the men

he works for. He is a chronic alcoholic, cannot stay away from it. He causes a lot of commotion. When he gets ahold of some drinks he gets out of his head. He will do this often if left alone. He is a very bad actor and does not have respect for anyone. When we put him on a job he had to be watched or he would leave and show up in the evening intoxicated. He is not trustworthy at all. On any job he is just no good as far as our company is concerned. To me a man like him would be better off away from the Army than in it.

After additional witnesses were called and various exhibits were introduced, the board concluded that this soldier should be separated from the service because of "habits or traits of character which render retention in the service undesirable." The Commanding General approved the recommendation and the soldier was separated early in December with a "blue discharge," which is a discharge "other than honorable." The applicant appealed, but the Secretary of War's Discharge Review Board concluded that there was no additional evidence of sufficient weight and credibility to warrant reversal of the previous action of the War Department. Here was the prototype of the soldier that the old Army officer referred to when he said that the illiterate or semi-literate was frequently an "expensive soldier."

A twenty-three-year-old Negro soldier from Ohio, L. H., after spending one month at the Special Training Unit at Camp Atterbury, Indiana, late in 1943, was assigned to the 613th Training Group at the Army Air Base at Lincoln, Nebraska. Within a month he was sent into the hospital with a diagnosis of "mental deficiency, borderline." He spent thirty days in the hospital and was then sent back to duty. Within a fortnight, he was returned to the hospital with the same diagnosis. During his first hospitalization the Commanding Officer of the hospital requested the Commanding Officer of the Lincoln Army Air Field to institute proceedings so that the man might be discharged on the grounds of ineptness. At the time of the hearing, the psychiatrist testified that "this man is a mental defective with an IQ of 75 and a mental age of ten years and two months. He is below the minimum standards of Mobilization Regulation 1-9 and is a risk if retained in the Army. It is impossible to get any useful service out of him, and he should be dis-

charged under Section VIII proceedings on the basis of ineptness and lack of adaptability."

Private H. testified that he was thirty-three; was born in Akron, Ohio; and was married. He continued:

I can write to my wife—and read, write a little. I only went to the third grade in school. I was waiting tables in a hotel; I was getting $12.50 a week, and $3.00 a week tips, and I got my food and uniform.

I have been in the army since the 18th day of October, 1943. I have never been punished by company punishment and have had no trouble with the M.P.'s. In civilian life didn't have nothing but trouble with drinking.

I been drillin' and marchin' and doin' everything I was told to do since I am in the army. I have taken some basic at Camp Atterbury in Indiana. I went to school to learn to read and write there; graduated from there, and they sent me here for basic. I went as far as I could go—up to the rifle range. They had cut out the obstacle course before we got that far. Drillin' was all right if they didn't do too much walkin'. My sides started to hurtin' me. I had trouble before I came in the army. I was in the hospital for it. I was drinkin' and picked up one end of a piano and lifted it up and something popped in my back. I was strapped in bed because I wouldn't stay in bed. . . . I got scared.

I get along very fine with the other fellows. Have no trouble with noncoms. I never been scolded by the lieutenants. My only trouble is that back. I don't know what kind of job I could do; anytime I start sweeping my side starts to bother me. Even carrying coal gets me down. If I get out of the army, I'll get medical treatment and try to fix myself up so I can work. I can't do anything but wait tables; I was turned down in a defense plant because of my back.

The record goes on to note that Private H. admitted that "I drink quite a bit, just when I can get it. I don't throw any out. I get nervous, and that's the only thing that settles me." With limited mentality, a tendency to alcoholism, and a physical disability, it is not surprising that his company commander acted to have him discharged as quickly as possible. Because of the fact that he had not gotten into serious trouble because of drinking, the board was willing to give him an honorable discharge on the ground that he was inept.

J. H. B., a nineteen-year-old Negro soldier, was born and grew up in rural North Carolina, and was inducted into the Army at Fort Bragg, North Carolina, in October, 1944. After spending two months at a Special Training Unit at Fort Benning, Georgia, he was assigned to a quartermaster unit at Camp Lee, Virginia, where he remained from January until the end of August, 1945, at which time he was given an honorable discharge because of ineptness and lack of ability for military service. The following quotation, entitled "Gist of Testimony," is found in his records:

> Private B. testified that his head and chest hurt him all the time during civilian life and after his induction. Private B. completed two years of grammar school. According to the testimony of the witnesses, Pvt. B. has never caused any trouble and does all he is told to do but is not very intelligent. The witnesses stated the Army could not reeducate or rehabilitate him to the point where he could do a useful day's work. He is able to do only light jobs around the company area and even at that requires close supervision. It is the opinion of the Board that Pvt. B. should be discharged from the Army due to inaptness and lack of adaptability for military service which render his retention in the Service undesirable.

A white coal miner who had been earning about $30 a week was inducted from his home state, Kentucky, late in 1943. After spending about one month in a Special Training Unit at Camp Atterbury, Indiana, he was declared literate and was sent for basic infantry training to Camp Croft, South Carolina. Three months later, he was ordered to appear before a board of officers who were holding hearings on whether he should be separated from the service. The record shows that he did not know what is meant by "the Axis countries"; that he did not know President Roosevelt's first name; that he thought there were ten nickels in a dollar; that he had heard of Pearl Harbor but did not know what or where it is. He thought that Roosevelt was the Governor of Kentucky, his own state. When asked how many would be left if a boy has fifteen newspapers and sells eleven of them, he claimed there would be five left, and he did this computation on his fingers. His platoon leader testified that "he didn't seem any too interested in his training; he just seemed to stare off into space. He never seemed to pay much attention. His inspections were not any too good. I

feel that he is dull mentally. I do not believe he can be trained to be a satisfactory soldier." The board agreed with this evaluation and gave Private C. an honorable discharge because the board members considered him inept and unsuited for military service. This soldier had been absent without leave twice during his short army career and had received two summary courts-martial. There may be some question of whether this soldier was in fact as dull as he appeared or whether he simulated stupidity in order to avoid discipline and to escape from service.

The four soldiers described so far whose service was adjudged not acceptable were discharged early in their army careers. Several others were classified as not acceptable even though they remained in the Army for a considerable period of time, and even though they received honorable discharges.

S. C. H. was inducted in September, 1943, and was not separated until May 3, 1946. Despite this long period of service, we concluded that his service was in fact not acceptable, that he was more trouble than he was worth to the Army. He was absent without leave for the first time in the spring of 1944 for a total of fifteen days, and again from November 5, 1944, to February 14, 1945, a total of ninety-seven days. He was sentenced to confinement at hard labor for six months, but on April 17 the balance of his sentence was suspended. His record shows one major hospitalization which occurred after he went overseas. He developed "new syphilis" and was hospitalized for thirty days. In his first major assignment after completing basic training in 1944 his efficiency rating was "unsatisfactory" for a period of seven months. Since his period of service coincided with the end of the war, a time of frequent reassignments from one unit to another, Private H. was seldom in a unit long enough for the commanding officer to assess his performance. However, since he lost 142 days by being absent without leave and by confinement after apprehension, and an additional thirty days because of "new syphilis," and since there were no strong counter-indications, this soldier's performance was evaluated as not acceptable. He was separated during the demobilization period in the spring of 1946. The following year he was

confined to a state reformatory "for a period of two to fourteen years for the crime of conspiracy to commit a felony.'

C. A. B., a Southern Negro, aged thirty, was inducted late in 1943 and separated for the convenience of the Government during the general demobilization in April, 1946, with an honorable discharge. His record suggests, however, that, on balance, the Army lost rather than gained from his service in spite of the fact that he served in both the European and Pacific Theaters. In the spring of 1945 he was convicted by a special court-martial of cutting another soldier on the back, shoulder, and arm with a knife. He was ordered confined at hard labor for six months, and served 110 days. Several months after his release, he was tried by another special court-martial because of his assault on another soldier whom he knifed on the hand. He was again ordered confined at hard labor for six months, and this time served 123 days. He was never promoted and had a total time loss of 233 days. Once again, it is interesting to note that his post-separation record contains the notation "committed to the Penitentiary on 18 April 1950 to serve a sentence of one to three years for carrying a concealed weapon."

There was yet another type of soldier who in our opinion failed to give acceptable service, although the cause of his failure was not so much mental deficiency or violation of discipline as it was emotional weakness.

C. E. C. was a nineteen-year-old white soldier who was inducted from Tennessee in September, 1943. Prior to entering the Army he had worked as a sawmill laborer at a weekly wage of about $10. After three months at the Special Training Unit at Camp Shelby, Mississippi, he was sent to Camp Blanding, Florida, for infantry training, which he completed with an efficiency rating of excellent. The end of August found him in the South Pacific, where he spent the next several months in a replacement depot awaiting assignment. On January 1 he was admitted to the 29th General Hospital, New Caledonia, with the diagnosis, "psychoneurosis, mixed severe, manifested by congenital inadequacy, infantile emotionality, a

hysterical fugue state and multiple somatic complaints." There was a further notation that he was mentally deficient, a moron with an I.Q. of 48. On January 26 he was sent back to the United States, and by the end of March he was separated at the General Hospital at Camp Pickett, Virginia, with a Certificate of Disability Discharge. The reasons for considering him not acceptable are made clear by the following summary of his condition, presented to the Board of Officers in New Caledonia:

A 21-year-old, single, white male with a positive family history of psychosis, neurosis and presumably mental deficiency who showed many childhood neuropathic traits and who is practically illiterate, stopping school in the second grade at the age of 12. Most of his civilian work was as a farmer, and he has always lived at home until his induction. He has been a casual since coming overseas in August, 1944, has been in no combat, never held a rating, and has had only one disciplinary difficulty in the Army, an AWOL for about five days. He states he has always been "nervous" and has suffered from headaches since childhood. He is greatly concerned over his home situation and was hospitalized in a hysterical state. He presents multiple traumatic and psychasthenic symptoms.

We have presented the records of seven soldiers whom we placed in the not acceptable category. The reader will recall that thirty-eight graduates of the Special Training Units were so classified. We have deliberately presented a large number of these cases because of the importance of the not acceptable group. They were the men on whom the Army took a chance and lost. In war the investment of limited resources in men who fail to perform is dangerous. It is not possible for us to analyze in detail the factors contributing to the ineffective performance of this group. We have had to be satisfied with identifying them. However, as part of our comprehensive investigation of the Conservation of Human Resources, we are currently engaged in a study of the effective and ineffective soldier.

Even on the basis of these few cases, however, several comments can be made about the Army's manner of handling the men who failed to perform effectively. Although supposedly a strict disciplinary organization, the Army actually gave a man not only one chance but several chances before punishing him severely or re-

moving him from the service. Several men who were kept in the Army until demobilization really failed to give any worthwhile service but were never severely disciplined. Like most large organizations, the Army apparently was able to carry a considerable amount of "dead wood." It may well be that this considerate approach, though not necessarily adhered to in every case, was sufficiently prevalent to be noticed by many soldiers. Instead of contributing to efficiency it may actually have militated against it. There were probably a considerable number of men who would have tried harder to succeed if they had been sure that swift and certain punishment would follow their unacceptable performance. The extent to which the Army was unduly relaxed is also indicated by the fact that it was willing to grant honorable discharges to men as long as they had not become serious troublemakers during their period of service.

THE ACCEPTABLE

But if there were a considerable number of graduates from Special Training Units who were not acceptable, there were many more who served in an acceptable or superior manner. The acceptable group was really composed of two different types of men. One was the soldier who was more or less average; he met the demands which were made on him without performing in a distinguished manner, but likewise without causing the Army any special trouble. Then there was the man whose acceptable performance was really a composite of good performance counterbalanced on occasion by unacceptable performance, so that his acceptable rating was an average of the two.

W. G., a nineteen-year-old Negro soldier from South Carolina, was inducted in November, 1944, and sent immediately to the Special Training Unit at Fort Benning, Georgia, where he spent a month. Prior to his entrance into the service, he had been employed in general farm work. His record shows that he had completed seven years of school, which probably explains why he was able to finish his special training in less than four weeks. After completing his basic training at the Infantry Replacement Training Center at Fort McClellan, Alabama, he was sent overseas to

the Pacific Theater. He served there for about fifteen months as a member of a quartermaster service company. His efficiency rating was excellent. He was returned to the United States for separation in September, 1946. At the time of his discharge, he was a cook. He had won two Bronze Service Stars for the Philippine and Luzon Campaigns. He had lost no time for disciplinary reasons; had never been in a hospital; had been on sick call only twice, once for a cold and a second time for gonorrhea. In October, 1945, he was promoted to private first class. Clearly, here was a soldier whose service was acceptable.

E. M., a thirty-year-old Negro born in Georgia, had migrated north and was working as a laborer at a weekly wage of $24 when he was inducted at Fort Benjamin Harrison, Indiana, in October, 1943. He had completed only four years of school, and so was sent to the Special Training Unit at Camp Atterbury, Indiana. He was assigned upon the completion of this training to a quartermaster service company at Fort Devens, Massachusetts. After six months of training, the company was sent to the European Theater, initially to a general depot in England. He remained with this company until it was returned to the United States a year later. Except for a few weeks prior to separation in November, 1945, his entire service was with this company. For such periods as efficiency ratings were available, Private M. was rated excellent. He was admitted to the hospital only once for an acute nasopharyngitis. Immediately after induction, he was confined to quarters because of a urethritis, which was stated to be non-venereal. These illnesses kept him from duty for fifteen days, but he lost no other time. He had no disciplinary troubles and was awarded three Bronze Service Stars for the Campaigns of Northern France, Central Europe, and the Rhineland.

R. L. C., white, was born in rural Mississippi and was inducted from there in October, 1943, at the age of nineteen. In civilian life he had been a farmer. He had completed six years of school. Shortly after induction he was assigned to the Special Training Unit at Camp Shelby, Mississippi, and remained there for more than three months. During this time he was hospitalized for a

fortnight with German measles. He was sent to the Field Artillery Replacement Training Center at Fort Sill, Oklahoma, and, after a number of reassignments, found himself en route to the European Theater at the end of November, 1944, as a member of the 254th Infantry Regiment. In the middle of January, 1945, while cleaning his carbine, he wounded himself and was hospitalized for a period of about a month, after which he was sent back to duty with the notation, "limited assignment." For the rest of the war and until he was returned to the United States late in 1945, he was assigned to an aviation engineer battalion. He was separated from the Army in March of 1946 during the general demobilization. His record shows that he qualified as a sharpshooter, with both the carbine and the rifle. He had been awarded two Bronze Service Stars for the Campaigns of Northern France and for the Rhineland. His record was free of disciplinary infractions, and he had been on sick call but once because of a cough which hung on for three weeks, during which he lost ten pounds. All of his efficiency ratings were excellent, though in many cases the comment was "unknown." This was to be expected in light of the frequent changes in his assignments.

Still another acceptable soldier was A. W. J., a 25-year-old white married farmer from Georgia, who was inducted in December, 1944. His main occupaiton had been farming forty-five acres, with mules and a tractor. His hobby was hunting. He had completed six years of school. He was assigned to the Special Training Unit at Fort Bragg, but within three weeks he was declared literate. His Army General Classification score at that time was 73. He was sent to the Infantry Replacement Training Center at Camp Wheeler, Georgia, where he completed his basic training with a rating of excellent and in May was shipped out to the Pacific. He served with a medical battalion of the 31st Infantry Division and after V-J Day was assigned to the 90th Field Hospital. In April, 1946, he was returned to the United States for demobilization. During his service in the Pacific he received a Bronze Service Star for the South Philippine Campaign. He had qualified during training as a sharpshooter with a rifle, and he had also qualified as a first-class gunner with a light machine gun. He had never been

in the hospital, and he had made but a single outpatient visit, for a cold. In July, 1945, he was promoted to private first class.

These cases speak for themselves. Certainly these men gave the Army acceptable service. The only point which one might raise is whether some, if not all, of them should not have been placed in a category higher than acceptable. They were men who did their job competently, who did not lose time for medical reasons, and who did not get into disciplinary trouble.

Two further points are worth mentioning. We might speculate about how these men would have performed had the Army made greater demands on them by presenting them with greater challenges and greater opportunities for distinguished performance. It was a general impression of many well-informed observers of and participants in military life that the average soldier was always willing to do what was required of him but seldom strained to do more. Hence to a considerable extent his performance level was determined by the situation which confronted him rather than by his own personality constellation. The other point that should be mentioned is that these acceptable soldiers did not try to "get away" with anything, particularly by seeking respite from their obligations and duties through medical channels.

GOOD SOLDIERS

Whatever questions the skeptic still may have retained at this point about the success of the program of inducting and training illiterates should be dispelled by the reading of the following cases which demonstrate very clearly that considerable numbers of the poorly educated group turned out to be good soldiers, not merely acceptable, but clearly good men. In reading these cases it is important to keep in mind the extent to which education was required to enable a man to meet certain performance standards.

H. L. B. was thirty-one when he was inducted from Chattanooga, Tennessee, where he was born. He was a finisher for a furniture manufacturer, and was earning $20 weekly. He had been a general painter for almost fifteen years, earning, when employed, up to $40 a week. He had been married and divorced, and had

remarried. Before starting work he had completed six years of school. Inducted at Fort Oglethorpe, Georgia, he was sent to the Special Training Unit at Camp Shelby, Mississippi, to which he was assigned for only five weeks. He was then sent to the Armored Replacement Training Center at Fort Knox, Kentucky, where he received his basic training, at the end of which he was classified as a "light tank crewman." His efficiency during basic training was assessed as excellent. He had a short assignment, about ten weeks, with the Headquarters Company of the 20th Armored Division at Camp Campbell, Kentucky, and then spent seven months with the 8th Armored Infantry Battalion at the same camp, during which he received a new duty assignment, rifleman. In all of these assignments his efficiency was rated as excellent. During this period he also qualified as a sharpshooter with the rifle. Early in February he shipped out for Europe as a member of the 20th Armored Division. This Division arrived late and was in combat for a relatively short time, although at one point, just before the German capitulation, it ran into fanatical opposition in the Munich area. H. L. B. was awarded the Combat Infantryman Badge, which made him automatically eligible for the Bronze Star Medal. Throughout his service overseas, he continued to receive excellent ratings. While still at Camp Campbell, he had been promoted to private first class. At the time of induction his physical defects record noted "syphilis, latent; defective hearing." However, throughout his entire tour of duty—he was separated just prior to the end of 1945—he was in the hospital only twice: once for pneumonia and a second time for only two days for observation because of pains in the abdomen. Moreover, he was on sick call but twice. He never lost any time because of disciplinary action.

E. F. was a twenty-five-year-old Negro from rural Mississippi at the time of his induction in August, 1943. He was single. For the two years preceding his induction, he had been working in a civilian capacity as a mess-hall hand, cook, and dishwasher at Camp Shelby for $20 a week. Before that he had been a farmer. He had completed five years of school. Shortly after his induction he was assigned to the Special Training Unit at Camp Shelby, Mississippi, in which he spent two months. Directly thereafter, he was sent

to a quartermaster service company at Fort Devens, Massachusetts, with a military occupational specialty of laborer. He spent six months with this company, receiving an efficiency rating of excellent, and then went with it to the European Theater. He stayed with this same company throughout his entire tour of duty, his efficiency rating remaining excellent. Shortly after returning to the United States in August, 1945, he became a member of the detachment at the Veterans Administration Facility, Fort Howard, Maryland, with which he remained until he was separated from the Army toward the end of January, 1946. All of his ratings were excellent. He received three Bronze Service Stars for the Campaigns of Northern France, the Rhineland, and Central Europe. Moreover, in February his unit was cited and received the Meritorious Unit Award. In June, 1944, E. F. was promoted to private first class. He had but one hospitalization, for acute appendicitis. His outpatient record shows occasional visits for chest colds and coughs and once for gonorrhea. E. F. had no disciplinary trouble and lost no time.

F. N. J. was only eighteen when he was inducted late in November, 1944. He was a Negro from rural Georgia, and his record suggests that he had spent all of his life close to his birthplace. Prior to entering the service he had earned $20 a week dressing chickens. Earlier he had been a farmer and had received wages in kind. He had been married but was separated from his wife. Inducted at Fort Benning, Georgia, he was immediately assigned to the Special Training Unit at that post, but remained there for only three weeks. His record indicates that he had completed five years of schooling. He was sent to the Army Service Forces Training Center at Fort Warren, Wyoming, where he remained during the first half of 1945. In June he was en route to the Pacific Theater as a member of a quartermaster truck company. He spent thirteen months overseas, and for this service he received a rating of excellent. He was returned to the United States at the end of September, 1946, and was separated shortly thereafter. He was promoted to technician fifth grade in October, 1945, but lost the rating because of a summary court-martial for speeding in violation of traffic regulations. Two other summary courts-martial con-

victions were also for traffic infractions, but he was never sentenced to confinement, only to loss of pay. Apparently, these were considered minor violations, for they did not stand in the way of F. N. J.'s being promoted to corporal in May, 1946. Aside from a fortnight's hospitalization as a result of mumps, he lost no time for medical reasons. His outpatient record shows that he had contracted gonorrhea on four occasions. At the time of separation there was a notation on his record, "recommended for further military training," which indicates that the Army considered him a good soldier.

A. W. F. was a white eighteen-year-old, inducted from rural Georgia in December, 1944. He graduated from grammar school at the end of seven years. A. W. F. delivered ice and coal to retail customers in a light truck for which he received $18 weekly. In addition, he raised cotton and corn on a forty-five-acre farm, using a team of mules for plowing. Inducted at Fort McPherson, Georgia, he went to the Special Training Unit at Fort Bragg, North Carolina, but almost immediately was determined literate. However, he remained a member of that Unit for about five weeks, during which he took the Army General Classification Test and received a score of 69. He was then sent to the Infantry Replacement Training Center at Camp Wheeler, Georgia, where he received his basic training during the next six months and was rated excellent. After a short amount of additional training at Camp Maxie, Texas, he was sent to the Pacific Theater, and was assigned to various field units. He remained overseas for about a year, during which time all of his ratings were excellent. When he was separated in the fall of 1946, he was recommended for further military training. He enlisted in the Reserve Corps and remained a member for three years. During the course of his infantry training, he qualified as a marksman with the rifle and also qualified in the use of the light machine gun. Since he was en route to the Pacific when Japan surrendered, he never saw combat. While overseas he was assigned to automotive repair work and served as a special vehicle operator. His hospital record showed only two admissions, for mumps and for a reaction to the initial vaccinations. There was but one entry in his outpatient log. A. W. F. was promoted to private first class

in January, 1946, and to corporal in February. During his whole Army career no disciplinary action was taken against him.

It is worth noting that these good soldiers came from very limited backgrounds, many from isolated rural areas, but that nonetheless they were able to make the difficult transition to the big impersonal organization that the Army was and to do so without loss of balance or personal direction. It is true that these particular individuals were subjected to relatively little combat action, but there is little reason to question that they would have been able to perform well had they been so challenged.

VERY GOOD SOLDIERS

Although the Army had more than 8 million men at its peak strength, it was not a mass army in the sense that the Russian or the Chinese armies were. Hence the efficiency of the American Army depended to a greater extent on the performance of each individual, and more particularly on the performance of those individuals who had the ability and the motivation to do better than the average. It is very important, therefore, to appraise any manpower program in terms not only of the numbers who fail but also the numbers which the program makes available who do an outstanding job. It may well be that we are much too conscious, in our critical appraisals of manpower programs, of those who fail and that we pay too little attention to those who are outstanding successes. This gives special importance, therefore, to the selected cases of men who turned out to be very good soldiers.

J. S. H. was just over eighteen when inducted into the Army from Cleveland, Ohio, late in 1944. He was white, single, and had completed eight years of schooling. He was born in West Virginia, but had been living for some time in northern Ohio. He had been working, immediately prior to induction, as a semi-skilled aircraft assembler earning $32 weekly. Before that he had been a general assistant and laborer in an aircraft plant. In light of his eight years of schooling, he did very poorly at induction on the Army General Classification Test, for he scored only 56. For this reason he was assigned to the Special Training Unit at Camp Atterbury, Indiana,

but shortly thereafter he was retested and made a score of 75, which, if not distinguished, was satisfactory. He was therefore determined capable of absorbing military training, and early in the new year was sent for basic training to the Infantry Replacement Training Center at Camp Wolters, Texas. He spent five months there and received an excellent efficiency rating. Shortly thereafter he was sent to Hawaii and assigned to the Headquarters Company of the Personnel Center of the Central Pacific Base Command. After three months service, he was promoted to sergeant. During the year that he spent overseas, all in Hawaii, he had several different assignments, but in every instance his efficiency rating was superior. When separated from the Army in August, 1946, he was a platoon sergeant. He lost no time in the hospital throughout his Army career. His pre-induction examination noted that he had "occupation dermatitis" and during his tour of duty, he visited the outpatient clinic five times because of skin eruption. He had lost no time for any disciplinary cause. Although Sergeant H. was inducted too late in the war to participate in combat, he must be adjudged a very good soldier because of the grade which he achieved, and because of the consistency with which his work was evaluated as being superior. It is well known that the rating of excellent was handed out too easily, but there is little doubt that a superior rating was reserved for soldiers of relatively high efficiency. Sergeant H., moreover, received a superior rating from five different organizations during his year in Hawaii.

E. S. S., a white married man of twenty-seven, was inducted at the end of October, 1943, at Camp Atterbury, Indiana. He, too, had had eight years of schooling but was found to be illiterate at induction. Just prior to his induction, he had been working as a riveter and assembler in a farm machinery plant, and before that he had spent eleven years as a machine operator, earning, at the end, about $45 weekly. He had been born in central Indiana and, as far as one can judge, had spent his entire life in the town of his birth. Shortly after induction, he was assigned to a Special Training Unit where he spent a month, at the end of which he received a score of 66 on the Army General Classification Test, quite disappointing considering his school record and his special training.

He was sent for further training to an engineer company at Camp Gordon Johnston, Florida, where he remained for five months and was trained as an ammunition handler. During this period, he was rated as excellent. In May he was shipped with his company to the Pacific, where he remained with the same company until early in 1946, when he was returned to the United States. During the period of his overseas service, his specialty was changed from ammunition handler to semi-skilled construction foreman. In every instance his work was graded excellent. Before going overseas, he qualified in the use of the carbine and the 30 and 50 caliber machine guns. E. S. S. earned four Bronze Stars for the Philippine Liberation, New Guinea, Northern Solomons, and Luzon Campaigns. He also earned the Bronze Arrowhead Award for participating in the amphibious operation at Morotai. In February, 1945, he was promoted to private first class, later that year to technician fourth grade, and then in December to staff sergeant. Just after getting overseas in August, 1944, E. S. S. received a summary court-martial because "he struck a non-commissioned officer in the face with his fist." Apparently, there were some extenuating circumstances because his only punishment was to forfeit $20 of his pay for one month. Since he later received a Good Conduct Medal and was promoted to staff sergeant, we have disregarded this incident. He lost no time for any disciplinary action, was in the hospital but once for less than a week, and was on sick call only once.

J. B., a thirty-two-year-old married Negro, was inducted at Camp Blanding, Florida, in October, 1943. He had never been to school. However, he stated at induction that his hobbies were "hunting, horseback riding, and rifle shooting." His civilian labor record showed that he was a semi-skilled laborer, and prior to that had been a section hand on a railroad. His earnings were between $25 and $30 per week. Shortly after induction, he was assigned to the Special Training Unit at Camp Shelby, Mississippi, where he spent three months. At the end of this period, he received a score of 61 on the Army General Classification Test.

His record suggests that even after spending three months in a Special Training Unit, he had scarcely acquired a minimum level of literacy. However, such men did not have to be discharged if

they seemed to possess the over-all capacity which would make it likely that they could complete training and serve successfully. J. B. was one of the men who was retained in the service on the ground that despite his limited literacy, he could probably make the grade. He was sent to Camp Claiborne, Louisiana, for training as a member of an engineer general service unit, where he was assigned an occupational specialty of "bridge builder." After eleven months of training, during which he was rated as excellent, the unit sailed for the European Theater. Shortly after the end of the war in Europe, the unit was sent to the Pacific. Throughout this period, J. B. was rated excellent. While in Europe, he earned one Bronze Service Star for the Rhineland Campaign. While in training he qualified as a rifle sharpshooter. Late in 1944 he was promoted to private first class, and in January, 1945, he was promoted to technician fifth grade. His record shows no evidence that he was ever in the hospital or that he ever appeared at sick call. When he was profiled at Camp Claiborne, he received a perfect mark on each item—general physical condition, upper and lower extremities, hearing, eyesight, mental and emotional stability. He had no disciplinary difficulties throughout his Army career, and at the time of separation from the service in the spring of 1946 he joined the Enlisted Reserve Corps in an inactive status.

J. S., a Negro born in Alabama, was living in Florida at the time of his induction in December, 1944. He was twenty-one and married, and had been working for nine years as a packing-case maker, earning $15 weekly. He had also had some experience in and around a sawmill. He had completed only three years of school and was therefore sent after induction to the Special Training Unit at Fort Benning, Georgia. He remained a member of the Unit, however, for less than a month, during which he took the Army General Classification Test and scored 64. He received his basic training at Fort Leonard Wood, Missouri, where he received an excellent efficiency rating. He then spent about three months at Camp Plauche, Louisiana, as a general carpenter, again with a rating of excellent. In August, 1945, he was sent to the Pacific, and for most of the thirteen months that he was in the theater, he was assigned to an engineer aviation battalion. His efficiency ratings

were excellent. In January, 1946, he was promoted to private first class, later to technician fourth grade, and in August, to staff sergeant. He had but one hospitalization, and that for mumps, immediately after induction. Aside from this one episode, his medical record is clear. Throughout his time in the Army he had no disciplinary difficulties, and his record notes that when he was separated he was recommended for further military training. One interesting point about J. S. was the fact that he had been convicted of manslaughter in 1939 and was given a seven-year sentence. He had been released, apparently for good behavior, early in 1944.

E. H., a white soldier, born and still living in rural Kentucky when inducted, represents perhaps the clearest case of a man who should be classified as a very good soldier. He was inducted at the age of nineteen in the summer of 1943. While being examined for registration a year previously, he fainted and fell and suffered a simple fracture and a lacerated wound, for which he was hospitalized at the local Air Force Station Hospital. Shortly after induction, he was sent to the Special Training Unit at Camp Atterbury, Indiana, where he spent two months. He had attended school for four years. The date is not given, but when E. H. took the Army General Classification Test, probably prior to his assignment to the Special Training Unit, he received the very low score of 42. After completing the special training, he was sent to the Infantry Replacement Training Center at Camp Blanding, Florida. Although many men received ratings of excellent for character and efficiency during basic training, E. H. was graded very good in character and only satisfactory in efficiency. He was trained as a rifleman. Immediately after "D Day" he was en route to the European Theater as a member of the 8th Infantry Division. He received the Combat Infantry Badge, which made him automatically eligible for the Bronze Star Medal. Moreover, he earned three Bronze Service Stars for the Campaigns of Northern France, the Rhineland, and Central Europe. But his most important achievement was the award of the Silver Star for gallantry in action, which carried the following citation:

Sgt. H., a squad leader, exposed himself to enemy small arms, mortar and artillery fire to work his way to within 25 yards of an enemy

machine gun position which was holding up their advance. He threw 2 hand grenades and then overran the positions, killing one of the enemy and wounding two others. Later, during the attack, his squad accounted for more than 30 Germans. Sgt. H.'s great courage, coolness under fire and devotion to duty were an inspiration to his men.

H. was promoted to private first class in October, 1944, to sergeant early in March, and to staff sergeant in October, 1945. During his army career he was in the hospital but once for a slight injury. His outpatient log shows two entries, once for a mild acute gastritis and a second time during basic training for painful right foot.

There is clearly no single pattern discernible with respect to the backgrounds of these very good soldiers. Although two of them had considerably more education than the average for the group, it is worth noting that one man had never been to school, failed to pass the examination in the Specialized Training Unit, and was retained in the Army only by administrative discretion. It is also worth noting that one man's record was marred by a civilian conviction for manslaughter, and that the winner of the Silver Star had hardly an auspicious beginning in the Army, either at induction or during basic training. This is simply further evidence of the extreme caution that must be exercised in singling out any one factor from which to predict a man's later behavior.

Now that we have presented twenty-two case records, we hope that the reader is in a position to form an independent judgment about the performance of the poorly educated soldier. We believe that our categories are most reliable at the extremes, those classified as not-acceptable soldiers and those whose performance was adjudged to have been good or very good. We place less importance on the intermediate gradations, particularly the subtle differences between acceptable and good, and between good and very good. But whatever the limitation of the classification system may be, we are convinced that more than four out of every five Special Training Unit graduates gave satisfactory performance, and more than one out of three were good or very good soldiers.

CHAPTER 8

FROM SOLDIER TO CIVILIAN

CONCLUSIVE EVIDENCE was presented in the last two chapters that the special training program established by the Armed Services, primarily by the Army, during World War II, met its principal objective, the speedy adjustment of illiterate and poorly educated young men to military life. The two to three months of special training given to these soldiers turned out to be a good investment for the military, for it provided a large source of manpower at a time when the country's reserves of manpower had seriously declined and when additional withdrawals from civilian to military life could be made only at a heavy cost to industrial efficiency or social welfare.

The Army found it necessary to establish this special training program because of deficiencies in the educational opportunities that had been available to these young men in the years when they were growing up. This is an example of the inevitable continuity in social life in which the advantages or errors of the past have a marked influence upon the opportunities or limitations of the present. Although this training program was geared to meet an emergency military need, the principle of continuity in social life foreshadowed an influence on the lives of the men after they left the Army and again became civilians. This chapter summarizes what we have been able to learn about this result of the program, and presents some evaluations by the graduates themselves.

We used two types of information in attempting to learn about the post-service experience of our sample of Special Training Unit graduates. First, we asked the Veterans Administration to search its records for evidence that any of the graduates had entered a claim for further education after they left the Army. Secondly, we sent each graduate a simple questionnaire, using the most recent address in the files of the Veterans Administration.

The education available to veterans was of three types: institutional, which included every level of the school system from grammar school to post-graduate collegiate instruction; on-the-job training, which was either industrial or in the service trades; and farming. Of the 311 graduates we sought information about in 1951, the records revealed that just about half had entered a claim for one or more of these types of educational benefit.

Of the group who sought these benefits, there was a large percentage who undertook institutional education, followed by a slightly smaller number who sought farm training, while only a few entered on-the-job training. A few men applied for and received several different types of training. There was practically no difference between the percentages of the whites and the Negroes who claimed educational benefits. However, there were some interesting differences as to the types of training sought by the two racial groups. The majority of the Negroes undertook institutional education, whereas most of the whites entered farm training.

A further interesting fact revealed by the Veterans Administration records was the much greater demand for training by veterans who had entered the Army from the South. Of these two out of every three sought training after their return to civilian life, whereas this was true of only two out of five Northerners. The group that had the highest percentage entering further training was the Southern Negroes. At the opposite extreme were the Northern whites. Almost 70 percent of the Southern Negroes took additional training, whereas this was true of only 35 percent of the Northern whites. The accompanying table summarizes the percentage of men in each group, by race and region, who claimed further education and the type of education which they sought.

These veterans differed not only in the type of education they

PERCENTAGE OF CLAIMS FOR EDUCATIONAL BENEFITS AS REPORTED BY THE VETERANS ADMINISTRATION, BY RACE, REGION, AND TYPE OF TRAINING

		Total		*Northern*		*Southern*	
TRAINING	*Total*	WHITES	NEGROES	WHITES	NEGROES	WHITES	NEGROES
Institutional	25%	14%	37%	12%	28%	16%	48%
On-the-Job	3	5	2	3.5	1	6	3
Farm	17	23	9	16	7	32	12
Combination	5	6	4	3.5	4	9	5
Total	50%	48%	52%	35%	40%	63%	68%

entered upon but also in the length of time they pursued it. About 25 percent of the group stayed in training for two years or more, and another 30 percent were in training for between one and two years. Seventeen percent of those who started dropped out before the end of the third month. Slightly more than 25 percent had between four and twelve months of training. One of the interesting regional differences is that the men from the South not only claimed more education than those from the North, but those who claimed it stayed in the program more than twice as long—an average of twenty months compared to eight months. Although the whites and the Negroes claimed training at about the same rate, the white veterans remained in training a little longer than Negroes—an average of seventeen months compared to thirteen.

Formal education is, of course, only one possible facet of a veteran's post-Army adjustment. It would have been desirable, had it been feasible, to conduct personal interviews with the Special Training Unit graduates to learn how, if at all, their later life had been affected by the special training. Unfortunately, this was impractical and recourse was had to a mail questionnaire. The questionnaire and the accompanying letter were both quite simple. The letter follows:

Dear Mr. _____:

I am writing to you because you are one of the men who had special classes for education during the last war. As you know, these classes were for men who hadn't had a chance to get much education back home. General Eisenhower asked us to find out how the soldiers who were in these classes made out in the Army. You can help us by answering a few questions.

We want to know how you liked the classes and if they helped you get along better in the Army. We would also like to know if what you learned helped you after you got discharged. You can help us by answering the questions.

If you don't have an answer to all the questions, answer the ones you can. If you want to write something extra, go ahead. We'd like to hear all you have to say. Don't be afraid to say you didn't like the classes if you want to. We want to find out how you really feel about them.

You don't have to sign your name unless you want to. We won't use anybody's name in our report.

Write your answers on the question pages and just mail them back to us in the stamped envelope.

Sincerely yours,

DOUGLAS W. BRAY

The questionnaire which consisted of two pages sought information on four major points. First, we were interested to learn whether the special training classes helped the man while he was in the Army, in what ways they helped him, and what, if anything, he considered to be wrong with the classes. Secondly, we wanted to know whether what he had learned in the classes had helped him since discharge. Thirdly, we were interested in the man's statement about his educational background prior to his induction and since his discharge in order to compare his reply with the records which had been made available to us by the Army and the Veterans Administration. Finally, we were interested in the job he had held and wages he had received prior to his induction and his current employment status in order to make a rough estimate of the extent to which there had been a change in his economic position.

We sent out a total of 328 questionnaires by registered mail. Since only 68 were returned undelivered by the Post Office, we concluded that about 260, or 80 percent, were received. Just over half of the men who received a letter replied. Of the whole group, including those whom we were unable to contact as well as those who did not reply, we received filled-in questionnaires from 42 percent. The known characteristics of the respondents, however, did not vary appreciably from those of the total group. There may

be, of course, unknown biases unrelated to the characteristics which we were able to compare.

The first question was phrased as follows: "Did the classes you had help you in the Army or would you have been just as well off without them?" Of the 130 answers to this question, just under a third of the men said that the classes "helped a lot," and just under a half said that they "helped some." About one man in six stated that he would have been just as well off without them, and the remainder, about 7 percent, gave equivocal replies.

The second question read: "If the classes did help you in the Army, in what ways did they help you?" Just over half of the men stated that the classes enabled them to read, write, and reckon. Just under a quarter of the men repeated the fact that the classes were helpful, but they found it difficult to specify in exactly what manner. About one man in seven stated that the classes helped him to be a better soldier; and another one in seven pointed to some specific aspect of life in which the classes were helpful.

The third question sought to elicit information about what might have been wrong with the classes: "Was there anything about the classes that wasn't so good? What was it?" Three out of five replied that there was "nothing wrong." Almost 20 percent made no comment of any sort. The major complaint, included in about one in seven replies, commented on the fact that the time they were in the classes was "too short." The remainder, about 6 percent, had some genuinely negative complaint. Although there can be no question that the overwhelming burden of the replies as to whether the special training had contributed to the soldier's adjustment in the Army was favorable, the following excerpts show that there was at least a minority who thought differently.

In reply to question 3, as to what was wrong with the classes, A. C. stated, "The Teachers had a Chip on there sholders." Then on the back of his questionnaire he wrote as follows:

Dear Sir: The reason that I did not like the school (I realize it was ment for a good purpose.) They treated us like dogs, instead of Humans. The worst camp I ever was in, looked like a bunch of Educated—you no what, getting a big salary to lay around and keep from going overseas. They should have been over there fighting like

the rest of us had to do. There was a bunch of Officers there that did not know left from right.

For God's sake if you have another school try and treat the boys like humans, and I assure you that they will make better fighters.

Yours truly,

A. C.

But much more typical was the comment of B. G., "They helped me understand about army life and also helped me to write home. If I hadn't gone to school I wouldn't have been able to write home." Similarly, C. K.'s comment, "I could scarcely write my name when I went into service. after my schooling I did all my writing." D. P. emphasizes a point that several men commented on—that if they had to do it over again, they would put more into it.

1. Yes the classes help me in lots of ways and I all so know of boys that came there that couldn't write there name did before we left there. I think it is a good thing if more time was put in at it.
2. I can write better read better and that is something if could do over again I would try harder to learn more.

E. R. had a favorable evaluation, although obviously from his reply the classes were much too short to accomplish very much:

1. Yes they helped me but I didn't get enough of the schooling.
2. Yes they helped me to read and write a little But not much because I didn't get enough.
3. No, I liked the classes I would like to get more of them if possible.

Post Script: PS. My wife is filling this out for me I don't have enough education to fill it myself. So as you see I need more education bad if possible.

F. S. thought that "the classes were all right but it could have some improvements. Such as peaple with good educations entering such classes to get away from Army basic training." He went on to say that "teachers and trainees tried their best in anyway they could but it impossible to learn too much in two months." G. T. felt much the same way:

I think the Ideal of the classes was good but they was not long enough

I believe it would have been better if the School would have last all way through training. and it could have been after duty hour. I would say about from 6 PM to 9PM.

H. W. was so enthusiastic that he even wanted college men to take the course!

I sure liked all of the classes very good. it is worth very much to any one in the servis it might Bee good for lots of collige learners to have a little part in it at least. I have saw some that I thought it might have helped if they had have had some.

Perhaps the most characteristic reply for those who entered the Army almost totally illiterate was the following by K. Z.:

1. i wood not have been any good at all because I could not write my name before I went in the army. The army has help me a lots in meny ways
2. it Learn me how to write and spell Just as I wont to no more about Those Thing—which I did not have a chance to get in my groing up days.

The fourth question was directed toward the influence of the special training on their adjustment after their return to civilian life. It was phrased in these terms: "Did anything you learned in the classes help you since you were discharged? If so, how did it help you?" Just under 20 percent failed to answer the question; slightly more than 20 percent indicated that the classes had been of "no help." About 20 percent referred to the fact that they now had control of the three R's. About 15 percent of the men said that their Army training had helped them to secure a better job or to improve their status; and another 10 percent indicated that their Army training had helped them to acquire greater skill. The remainder of the group made reference to some specific advantage or simply commented on the fact that education in general was helpful to a man. L. M. expressed that thought in these terms: "I don't recall to much about the studies now, but I think any education is helpful, and I willingly except it."

There was no doubt in N. P.'s mind that his Army training had helped: "I got beat out of neary ever thing I made before I went

in the army and since I came out I count with them." C. K. was more explicit: "Now since I learned to read and write I can keep my farm record and do all my writing." B. D. thought that the classes "helped me In getting a job. In doing the things I wanted to do most. which Is get ahead In life. and If I had the chance I would still like to go to school."

B. G. was most specific. He stated that the classes "helped me with the job I have now. I am a Foreman at the —— and I do a lot of reading and writing." H. K. revealed very clearly how his Army experience influenced his entire life:

> Yes the classes did help me. I enjoyed them. at that time I had begin to see where I needed more Education, and I put everything I had in it. So that I would have a better chance when I come back home for a better job.
>
> I started to Perry Business School, January 3, 1950. and I finished 20th Century Accounting and Clerical course. and then I got a chance to take a G.E.D. test and passed it. I then got a High School Equivalency Certificate. I am now taking Junior Accounting Course. I will finish it some time in the latter part of this year. I am going to School under the G.I. Bill. You can tell by my hand write that it was very poor when I had to stop going to school and help farm. It is not very good yet, but I have improved considerably to what it was. and I am still trying. I can type 40 words per minute.

H. K. went on to comment that these Army classes "helped me to realize that I needed more education so that I would have a better chance in life for a better job." During the last four years he had been employed as a truck driver earning $42 weekly by working sixty hours at 70 cents per hour. "The reason I am working for a salary like that the Bookkeeper is leaving right away, and I am going to get his Job as bookkeeper."

As one might expect, there was no tremendous change in the general occupational and income circumstances of these men as a result of their military service, even with full allowance for their special training. For the most part, the men returned to the regions of the country from which they had been inducted to follow the same general type of work which they had pursued earlier. How-

ever, it may well be that the men to whom the sixty undeliverable letters were addressed included many who had resettled elsewhere and were probably engaged in different work.

We were able to make certain comparisons between the wages which the men received before entering service and those that they were currently earning. Prior to their induction the median weekly wage was slightly more than $35, with men from the North averaging just under $40 and those from the South averaging slightly under $29. There was only a one-dollar differential in favor of the whites over the Negroes. At the end of 1951 the average weekly wage for all of the men who responded was just under $51, an increase of almost $16 over their pre-Army average. One of the most remarkable findings is the parallelism of the wage increase, North and South, white and Negro, which took place. For instance, the weekly average in the North of $39 in 1943–44 rose to $54 in 1951. In the South there had been an increase from a weekly average of $29 to $42. In 1951 the whites were earning just under $52; the Negroes, slightly more than $49.

Some attention should also be paid to the range. Three of the men who replied to the questionnaire indicated that prior to their induction they had no earnings, and twenty-two men, wages less than $20 weekly. Only eight earned more than $60 a week, and of this group only two earned more than $70. At the time when they replied to the questionnaire five men indicated that they were currently without earnings, but there were only three additional who earned less than $20 a week. At the opposite extreme there were, in 1951, thirty-five who earned $60 or more, including twelve men who earned more than $80. In the entire group that replied, three earned $90 or more.

Since the men were older, and a considerable inflation was under way, these income figures are not startling. In general they point to the fact that these men shared the experiences of the unskilled and semi-skilled population during this period in securing sizable increases in money wages and some increases in real wages. It would be venturesome to seek to extract more definite conclusions about the earnings and standards of living of the graduates of the Special Training Units from these replies to the questionnaires.

Some additional information about the men who replied can be gleaned from the letters which some of them appended, usually in connection with a particular request for information which they had been unable to obtain locally.

J. H., who was living in Columbus, Ohio, wrote as follows:

I was just a country boy and I didn't get much school but when I went in the army I couldnt write my name, but as you see that I can write and by that you know that the school is Helping me and other to My daddy taking sick and I Hand to work and didn't get much education But now I hope that you will understand.

Listen I will like for you to do something for me we got to set in school from 5-30 in to 11-30 at night and dont have no break I want you to try and do some thing about it. Because it is Heart on us and work every day. Please.

Sinc

J. H.

A. D. C. sent us the following note from his home in a small town in northern Mississippi:

Dear Sir:

Maybe you could help me. I have applied for Guard Duty job with the T.V.A. of Muscle Shoals, Ala. and so far I have not been able to get the job. If you know of anyone who could help me in this matter I would surely appreciate it if you would let me hear from you soon.

Very sincerely yours,

A. D. C.

A. X. replied in these terms:

Dear Mr. bray. I got your letter and you wanted too know how the classes helped in the army well I guess they did. My Work was loading and unloading ammination I was in the Quarter Master at first but was shiped to Mississipy I went to the 6 grade before going to the army and I think I was 16 or 17 years old. No I havent got no more Education. I was doing common labor and that what Im doing now. one thing theres no work much in White Sulphur this time of year.

A Kentucky veteran gave us a terse summary of his experience with special training in the Army:

Dear Sir:

I will drop you a lines to tell you the reson the Classes dident help me I dident have enought education to start with and just dident have enought classes.

Yours truly,

T. J. C.

C. J. F. wrote us a letter which itself reinforced what he had to say in it, namely that his Army education helped him very little:

dear sur.

I have just Rec. you Letter about the School I had in the army. and I have and all I can about it. But I would like to say that if you want to use my nane in your Report you can but the school have not help me at all. Sent I bin out but I have megre to get by so far. So I will close.

Very truly your

C. J. F.

Although E. F. R. from North Carolina has had anything but good luck since returning to civilian life, he nevertheless retained a warm feeling for what the Army had tried to do for him:

After being discharged from the Arm, I took advantage of the G.I. bill of rights in purchasing me a home, with the hopes of getting in the agriculture training classes. I signed up and everything was O.K., after a long delay the agriculture teacher refused to send them in.

Since three years have gone by I learned why he did not let me in the School.

However I lost my home and now indebt to the government on account of it.

Would like to get in some Schooling, some where, suppoe it too late.

E. F. R.

use my name in any way you see fit, I feel it helped me in many ways.

These replies tell us a considerable amount about the reactions of the poorly educated American to his experience with Army education during the war and the significance of this experience for his post-war adjustment. As indicated earlier, the men confirmed the findings of the earlier chapters which pointed to the success of the special training program as contributing to military

victory. Although some of the men found shortcomings in the Army's program, the major complaint was directed against the short time that they were permitted to remain in it. From the military point of view, this was not a shortcoming since many of the men were able to perform at a generally satisfactory level after a period of instruction of no more than two months.

It is important that more than 50 percent of the men who received letters took the time and trouble to fill out the questionnaire. For the most part their replies were written in their own hand, although we have quoted one individual who indicated that he could not write the reply himself. There were probably others who did not specify that the questionnaire was filled in by a relative or friend. Thus, despite the limitations of penmanship, grammar, and punctuation the fact remains that men who entered the Army either totally or largely illiterate had acquired a sufficient basic knowledge of reading and writing during the eight or twelve weeks that they were given special instruction to be able to make use of these skills six years after demobilization. Admittedly, many of these men had added to their skills through education which they received after demobilization. However, the important point to note in this connection is the stimulation which they received, and which many of them commented on, from their exposure to the Army's training program.

One cannot review these materials without recognizing that the opportunity afforded these men to acquire in adulthood what most people acquire in childhood—the basic tools for communicating with their fellow men—gave new and heightened meaning to their lives. Several respondents commented on the fact that their whole adjustment to life had altered because they had acquired the ability to read and write. Clearly this episode in military history has significance far beyond the purely military domain. The national emergency of 1941–45 brought certain national problems into heightened focus. The measures that were taken to deal with these problems, in particular the problem of the poorly educated, must be evaluated, not solely by what they contributed to military victory, but by the lessons which they hold for civilian welfare.

CHAPTER 9

SOUTHERN INDUSTRY AND THE UNEDUCATED

A CONSIDERATION of the role of the uneducated in contemporary industry must take as its point of departure certain contradictory trends outlined in earlier chapters. Since 1890 there have been striking increases in the number of children who remain in school long enough to acquire basic literacy. On the other hand, as late as 1940 the number of persons with less than a fifth-grade education employed in the economy amounted to approximately 12 percent of the total male civilian group. In reviewing the results of the Selective Service examinations during World War II, we found among the younger men in the age group from eighteen to thirty-seven sizable numbers who were rejected for military service because of poor educational and mental capacity, and an additional large number who could serve only after they had been given special training. We also found that most of the poorly educated proved to be adequate soldiers and a considerable number were, in fact, good or very good. Furthermore, they had succeeded in reintegrating themselves into civilian life upon their return from service.

Although these trends hardly permit generalizations about the uneducated in American life, there is one characteristic that can be found in every collection of data: the largest number of the poorly educated live in the Southeastern part of the United States. There are a few noticeable concentrations elsewhere—the Mexicans

in Texas, the Indians in New Mexico and Arizona, the Southern migrants in the larger urban centers of the North, such as in Detroit. But despite these and other "special cases," the heart of the problem is definitely located in the Southeast.

It is appropriate, therefore, to concentrate on Southern industry in seeking to determine the practices which currently prevail in civilian life in hiring and utilizing the poorly educated and the illiterate. It is likewise appropriate to concentrate on industrial practices, for it is industry which gives the special dynamic to American life and which is doing so much to alter the pattern of life in the South. We noted earlier that not only were the poorly educated heavily concentrated in the Southeast, but a very high percentage of them lived on farms. But the number of persons living on Southern farms has been declining rapidly in consonance with the general decline in the farm population throughout the country. The fact that so many of the poorly educated were originally on the farm gives heightened importance to this shrinkage in farm employment and adds further significance to the practices of industry which, together with the service trades, offers this rural uneducated group its only significant alternative for employment.

Prior to seeking information about current practices governing the employment of the uneducated, we made a search of the literature dealing with the broad social and economic changes that have been under way in the South during the past several decades, particularly that literature which appeared to have a direct bearing on the interrelations of the educational level of the population and the industrialization of the region. We were less successful in this search than we had anticipated. As far as we were able to ascertain, few students have given much consideration to this specific question. On reconsideration, however, the paucity of studies appeared less surprising in light of three major considerations. First, the substantial industrialization of the South is, except for cotton manufacturing, of recent origin; hence the number of significant case illustrations would inevitably be small. Secondly, the striking rise of the educational level in the South during the past several decades has made it possible for an industrialist establishing a plant below the Mason-Dixon line to anticipate that his employees would be basically literate. Thirdly, the discrimination

against the hiring of Negroes as machine operatives or for other types of industrial employment has insured that the group in the working population with the highest percentage of illiteracy would not come to the attention of the industrialists.

A further reason could be adduced. Early manufacturing was heavily concentrated in cotton mill operations, which made a very low demand on the intellectual capacity of the work force. Good health, reasonable emotional stability, and some manual dexterity were more important qualifications than a ready ability with numbers and words. Some flavor of the industrial conditions which existed a generation or so ago is provided by Jennings J. Rhyne's book, *Some Southern Cotton Mill Workers and Their Villages.* In his study of 500 North Carolina cotton mill families in five different communities prior to 1930, Rhyne found that 15 percent of the fathers had never been to school and that 25 percent had had less than five years of schooling. Thus, 40 percent were either totally illiterate or were at best semi-literate. One of his more interesting findings relates to the sons in these families. Although only 5 percent of the sons had never been to school, 27 percent had dropped out before completing the fourth grade. In short, there had been some reduction in the totally illiterate group, but the children, who were growing up in mill villages, showed only modest advances over their fathers, who had grown up on the farm.

Rhyne presents two interesting cases of families in which all of the members were totally illiterate. The head of one family stated frankly that he was opposed to education of any kind. He felt that education "did not pay" and that it "made people mean," a conclusion which he had reached because a female relative, after having had the advantages of a good education, led a dissolute life. The family had succeeded in keeping the four children out of school by frequent changes in residence—no fewer than twenty-two in eleven years. The economic pull of the mill can be seen in the fact that at the time of the study each child was earning $11 a week while the father's earnings were only $12. The second case had many resemblances to the first. Here the five children had had some contact with school but not enough to acquire basic literacy. The father stated that he did not think it worthwhile to educate his

children since "about all they can do is work in the cotton mill anyway."

It is clear that these particular examples were drawn from the "lowest element" of the Southern mill village population, lowest because of their excessive mobility as well as their general attitudes toward work and life. Another interesting piece of information contained in the Rhyne book relates to the educational background of fifty cotton mill officials. Four had never been to school, and ten had failed to go beyond the fourth grade. About one in three would have been illiterate had they not educated themselves.

The intervening years brought changes, so that this description of earlier conditions carries with it some degree of unreality. More industry, and more diversified industry, has come to the South. The quantity and quality of the schooling received by the young has undergone striking improvement even though it may appear deficient when it is contrasted with more favored areas of the country. As a result the number of illiterates in the population has declined, both absolutely and relatively, and this group has acquired a less conspicuous role; more and more they have been pushed to the periphery of the society.

It is never simple to secure a reliable estimate of the major trends in a situation as dynamic as that which has characterized the South during the past several decades. Nevertheless, we wanted to inform ourselves as best possible about the present status and prospects of the uneducated in Southern industry. We recognized that the alternative to a major field investigation was to elicit the opinions of Southern industrialists. They have had a continuing exposure to the problem because of having to decide where to locate new plants and needing to establish specific policies governing the hiring and utilization of workers with varying educational backgrounds.

We followed three major avenues of approach in seeking information about the role of the uneducated in Southern industry. First, we established contact with a number of individual consultants and consulting firms who have had extensive experience in management and personnel problems in Southern industry. Secondly, we had previously established relations with some national companies that were operating plants in the South; their

personnel were more than willing to assist us in this inquiry. Finally, we asked a group of personnel associations located in various regions of the South to cooperate with us by requesting their members to answer our specific inquiries about the uneducated.

We sent the following letter to the officials of the personnel associations with whom we had established contact.

Dear Mr. Davis:

We have been engaged here at Columbia University for the last year and a half in a comprehensive study of selected national manpower problems. The Project was initiated by General Eisenhower because of his concern with the wastage of our national manpower resources. This is a cooperative investigation: the University is receiving help from industry, labor, and government in carrying out its work.

I am pleased to enclose with this letter a copy of our first comprehensive Progress Report which has just been issued. You will note that starting on Page 10 of this Progress Report we refer to a study that we have under way dealing with "The Uneducated." We have worked up the military aspects in some detail and are now seeking to inform ourselves of the range of practices and experience of civilian industry when it seeks to employ illiterate or semi-illiterate persons.

I am writing to you at the suggestion of Mr. Ernest Dale of the American Management Association, who thought that you would be in a position to assist us. We would be very appreciative if you could send us such information as you have available as well as your own evaluation of the problem. We would also hope that you might secure additional background for us from members of your Association who might be able to throw light on these issues.

Among the questions of particular interest to us are the following:

1. To what extent do industrialists consider the availability of educational facilities in determining the location of new plants? Do they seek to avoid areas where the educational level is known to be low?
2. Is it customary for industry in the South to establish minimum educational requirements for hiring of new personnel?
3. To what extent are automatic screening devices employed, such as the requirement that a person seeking employment must fill out an application blank?

4. To what extent do the jobs which most workers perform really require that they have some degree of formal education?
5. Do any firms provide special education for the illiterate, so as to enable them to be promoted to more difficult work?
6. To what extent are minimum educational requirements, where they exist, based on the belief that they facilitate the adjustment of labor in general—the ability of employees to fill out complicated forms, to figure their pay, to understand various clauses in their work agreements—rather than on the specific demands of the work itself?

In short, we would like to have called to our attention any special problems which arise when one employs the poorly educated. The questions outlined above are suggestive rather than comprehensive.

I would be very appreciative, indeed, of any assistance that you would be able to give us. I would like to add that in connection with my work as Consultant in Manpower and Personnel to the Secretary of the Army, the problem of the effective utilization of the uneducated is a matter of real concern. Hence, such assistance as you will be able to give us will contribute not only to our basic research investigation but will also make a contribution to the current military policy.

Sincerely yours,

ELI GINZBERG

We received a total of twenty-seven replies. As would be expected, the textile industry was heavily represented. We also secured, however, information from companies in the following industries: metal products, petroleum, explosives, paper, steel, aluminum, chemical. Moreover, many of the individuals who replied commented not only on their own company but on a range of industries with which they were acquainted. Replies were received from Virginia to Texas, with a heavy concentration in the Southeastern states, particularly North and South Carolina and Georgia. One personnel organization took the trouble to take our initial letter and construct a questionnaire on the basis of it, which it then distributed to its members. It then summarized the replies received and commented on whether they were representative or not.

We recognized at the outset that by relying on correspondence we would at best be able to secure only a sense of the broad general

picture rather than reliable detailed findings. This turned out to be so. Although we came into contact primarily with the larger employers, the range of comments which we received from many respondents about conditions in their areas counteracted this bias to some degree.

In answering our first question, whether industrialists consider the availability of educational facilities in determining the location of new plants, most respondents replied in the affirmative. Those respondents who sought to estimate the importance of educational facilities in determining location, indicated that it had a relatively low weight, surely not more than 20 percent. Some indication of the range of opinion is indicated by the following quotations from their replies.

One of the largest textile manufacturers commented:

> We have given relatively little consideration to educational facilities in determining the location of new plants, since most communities in the general areas in which we operate have approximately the same educational levels.

Another very large textile organization wrote:

> I would be hesitant to attempt to estimate the extent to which industrialists consider the matter of educational facilities in determining the location of new plants but certainly it is a consideration that is seldom, if ever, overlooked. As you no doubt know, it is not uncommon in the textile industry for companies to subsidize existing educational facilities where they are considered inadequate or where public or available private funds are inadequate.

An executive of an important petroleum company in Georgia was certain that educational facilities were an important consideration, at least in industries such as his which had a large capital investment per employee:

> Industry very definitely looks on the availability of educational facilities in selecting new plant sites. Generally, good educational facilities anywhere are considered drawing-cards for new industries.

On the other hand, a metal fabricating company located in Virginia did not give much weight to the availability of educational

facilities, possibly because plants in this industry are located in communities with a rather high level of public education:

Our industry, being metal fabrication, usually starts on a relatively simple shop operation. As experience grows and capabilities increase, the size of the business naturally increases, therefore, as far as the writer can determine, our industry does not determine the availability of educational facilities in locating a new plant. We recently had the experience of establishing two small assembly plants in conjunction with our business. While we considered the availability of manpower, we did not deem it necessary to look into the educational aspects in regards to this location.

A powder manufacturing plant located in Virginia indicated that the concern with education depends upon the types of operations involved:

If the work is of a routine nature, requiring a minimum of recording, education is not a prime factor. Most of the available manpower in this section can read and write. Technically skilled people are usually imported or drawn from college graduates, such as V.P.I.

A fabric manufacturer in North Carolina commented that "industrialists always consider the educational facilities when investigating location of a new plant." He went on to point out that they also inquire about recreational facilities and that they "seek areas with a higher, rather than lower, educational level."

An important aluminum manufacturing company with headquarters in Virginia indicated that the availability of educational facilities or the educational level of an area has never been a consideration in determining the location of new plants. Availability of labor has been a consideration, but even this factor has usually been outweighed by others. Apparently, the availability of power, transportation costs, and allied factors are of greater significance.

One of the largest consulting engineering firms with an intimate acquaintance with the textile industry throughout the South appraised the situation in these terms:

To date, industrialists in the textile industry are seemingly giving but relatively little attention to the question of educational facilities in the areas where they are considering new plant locations. I do not

think they are avoiding the areas, but in general the subject has seemingly not become important in their eyes. There are many exceptions, of course. The forward-thinking industrialists naturally would prefer to be in areas where high schools and colleges are available.

After discussing the question at length at a meeting of the Personnel Directors Association of an important industrial community in North Carolina, the consensus was as follows:

It is the opinion of this group that most corporations do include in their surveys educational facilities in determining the location of new plants. We feel that where there is an adequate labor supply they usually find sufficient number of people to get their educational requirements. It is also the opinion of this group that where the labor market is tight more weight has to be given to this subject. We also feel that in the future more thought will be given to this in the location of new plants, because industry is becoming more and more scientific in the things undertaken to do which we believe is one of the outstanding reasons why we can outproduce the rest of the world.

It is not easy to generalize from the range of opinions in the foregoing excerpts about the extent to which industrialists in the South give consideration to educational facilities in locating their plants. It is possible, however, to identify at least some of the major points which bear on the subject. To begin with, it is quite clear that industrialists give, at most, some consideration to the availability of educational facilities, but that they are not preoccupied with this factor. Either there is relatively little difference in the educational levels throughout the South—a view advanced by one respondent—or the level of education which exists throughout the South is sufficiently high to provide a labor supply that has the necessary prerequisites for successful employment. A careful reading of the replies suggests that the latter is prominent in determining the attitudes and behavior of Southern industrialists.

The textile industry, from many points of view the most important in the South because of both its age and scale, is apparently less concerned with educational facilities than are certain newer industries, particularly those with a heavy investment of capital per worker, usually associated with a high requirement for skilled

personnel. The demands made upon the majority of textile workers are apparently of such order that they can be readily met, even by a population that has had a limited amount of educational exposure. Many decades ago, when public education was in an early stage of development, progressive textile manufacturers frequently subsidized the local school. Today they are occasionally concerned about the quality of available educational facilities, but for a different reason: they want to be sure that they do not place themselves at a competitive disadvantage in attracting and holding workers who value a good education for their children.

The range of opinion expressed points to the conclusion that the advances in public education during the past several decades have been sufficiently rapid to forestall any particular concern on the part of industry with the educational background of its employees. This is particularly true for those employers who are located in the larger cities. In summary, it appears that the advances in education have been more rapid than the requirements of industry for a larger number of specialized personnel. The appraisal of the Personnel Directors Association in Charlotte, North Carolina, previously quoted appears to be the best over-all assessment of the problem. When there is an adequate labor supply, the corporations usually find a sufficient number of adequately educated persons to meet their requirements. When the labor market is tight, more weight is given to this subject.

Our inquiry was concerned with two other facets of the attitude of industry toward education: the practices of Southern industry with respect to hiring individuals with limited or no educational background and the experiences of industry in trying to utilize the uneducated. Specifically, we asked whether Southern industry established minimum educational requirements for new personnel; and further, whether it made use of such automatic screening devices as a written application blank. Once again, we received a range of answers rather than unanimity.

A management consultant with wide experience in the South took the following explicit position:

> The policy of nearly all corporations in the South is to employ these people [illiterates] without question, and they are assigned to work which they can do and do properly. Some of the finest workmen in

the South, men who are intelligent, who speak intelligently, and who work efficiently are total illiterates.

In much of the labor in the cotton mills and other types of Southern employment, illiteracy poses no barrier per se.

A consulting engineering firm with wide experience in the Southern textile industry tended to confirm the foregoing appraisal, at least for textile mills:

Very few mills in the South have established minimum educational requirements for hiring operating personnel. They do, however, give a great deal of weight to college education and especially textile schools when hiring their key men or line staff men.

I would estimate that about one-half of the textile mills in the Country automatically screen persons seeking employment. Some go into this subject in extreme detail, while others scratch the surface.

The vice-president of an important textile concern with many mills in the South replied to the inquiry as follows:

In employing skilled employees or learners whom we plan to train to become skilled operators, we endeavor to employ those with a high school education. If, however, an applicant for a semi-skilled job, has had considerable practical experience, and consequently would require no further training, the matter of the applicant's educational attainment would be considered relatively unimportant.

This writer went on to say that

in using the phrase "automatic screening devices" I assume you refer to devices designed to determine whether the applicant can read and write. Although I believe that practically all industries in the South require the filing of application forms, they are not necessarily used as "screening devices" since as a matter of expediency the blanks are often filled out by personnel office employees, the applicant being required to sign the form.

Another large textile firm replied along the same general lines:

We maintain minimum educational requirements for hiring new personnel, but this is flexible and the type of job, skill required, and many other factors enter into just what education we would require from a given applicant.

Ordinarily we require the person seeking employment to fill out

an application blank, although in a few instances this is done by our plant personnel supervisor.

A large textile manufacturer with plants located in the most important Southern cities stated that "all applicants are carefully screened and checked thoroughly from an application form. . . . The vast majority of our employees are white women sewing machine operators. It is necessary that they have some degree of education."

A large fabric manufacturer located in a rural region in North Carolina emphasized that the question of minimum educational requirements depends on the type of employees that the industry is hiring.

There are minimum educational requirements for skilled or specialist jobs, such as chemist, designers, etc. Also clerical and administrative employees. Generally there are no minimum educational requirements for the rank and file employees, except when a specific job requires educational training.

To what extent are automatic screening devices employed? The two methods used to any great extent are usually the initial interview, with application blanks completed, and the aptitude test. The interview is used mainly to determine the applicant's character, past experience, future desires, ambitions, etc. The aptitude test is used to determine which type of work the employee would be best suited for. Again the screening methods vary with the type of work. However, I believe you are interested in the rank and file employees rather than the specialist.

So much for textiles. A South Carolina paper manufacturer wrote as follows:

We require a minimum of fifth-grade education or its equivalent. Our minimum requirements, therefore, are pitched at a literacy level that would be expected of individuals who had completed five years of elementary school or who had acquired the equivalent. By using the fifth grade as a critical achievement for employment, we naturally get an average somewhat higher than this. Normally, we do not hire illiterates. . . . In years past and during the recent war period, we did hire illiterates and our thinking today is based on past experience.

An executive of a Georgia petroleum company with wide ex-

perience emphasized the variability of practices with regard to minimum requirements:

It depends entirely on the type of industry. Small sawmills, for example, that only stay in a location until the timber is removed and then move on, pay very little attention to educational background in the hiring of new personnel. This is generally true of the construction industry also. Generally most industries require at least a formal grammar school education and increasingly large numbers require a high school education for their regular employees. They do not require it for temporary casual work, such as is generally performed by common labor—mowing a lawn, digging ditches, felling trees, etc.

Again it depends on the size of the company and its activities. All companies except the very small ones require that an application blank be filled out. In small towns or rural areas with small companies this is not generally necessary or required, as the foreman or the manager knows all the people personally that he hires.

A petroleum company in Texas replied:

Minimum educational requirements are necessary for certain types of jobs and the application blank indicates the employees' formal training and experience.

All employees fill out an application blank or present an application blank filled out. In the past some employees have been hired for labor work who obviously could not write well enough to fill out the blank. However an employee is required to write well enough to sign his name.

A large metal company wrote as follows:

Our company now operates or has operated plants in the past in Virginia, Kentucky, Tennessee, Alabama, Georgia, Arkansas, and Texas. Over-all educational requirements have never been established by the company, however the individual plants have established flexible requirements which have varied in accordance with the labor supply. During the last two years one of our plants in Virginia has restricted their employment to those having at least one year of high school, however the labor shortage is requiring the plant to relax this requirement. Subsequent to World War II and until approximately six months ago [early 1951], one of our operations in Arkansas was employing only those who had the equivalent of a high school

education. These restrictions have been relaxed recently due to the labor shortage. In general, those responsible for employment at each location have endeavored to maintain minimum educational requirements, although such requirements have had to conform to availability of labor.

Applications are a prerequisite to employment at all of our locations, however, if the applicant does not have sufficient education to fill out the application, it does not in all instances preclude employment consideration, particularly if there is no other labor available and the applicant possesses the needed skill.

A powder manufacturing concern located in Virginia emphasized that it did not have minimum educational requirements for employees performing ordinary work but did for those jobs requiring higher skills. And a metal fabricating concern, also located in Virginia, stated that they had not established any minimum educational requirements and offered the following explanation: "The type of employment that we do ranges from purely manual, non-thinking, to highly skilled and technical jobs. Therefore a man's educational background is a necessarily limiting factor to the type of job he can hold."

One Personnel Directors Association summarized the discussion by saying that in general companies do use minimum educational requirements and that most of the companies "of any size" use application blanks and other screening devices. The Charlotte Personnel Association, which had sent out a questionnaire to its members, informed us that of the thirteen respondents nine stated that they had established minimum educational requirements in hiring new personnel, while four did not. Of those who did, the majority required only the completion of elementary school, while the others had higher requirements, depending on the job, up to and including graduation from high school. All of the respondents made use of an application blank, and ten of the thirteen supplemented the information obtained in this manner through interviews and by the use of tests.

Before trying to order these replies and assess their import, it is well to recall the particular focus of our inquiry. We were interested in discovering whether the hiring practices of Southern industry made it unlikely or impossible for the totally illiterate

or semi-literate person to secure industrial employment. There is no reason to question the generalization of our first respondent to the effect that in the past a large number of illiterate workers were found in Southern industry, many of whom performed at a high level of efficiency. The key words, however, seem to be "in the past." There are certainly illiterates in Southern industry today, but it appears exceedingly difficult for a young illiterate to find an industrial job today in the South. Our replies from the textile concerns suggest that even in this sector of the economy, which probably has the least stringent requirements, current practice dictates that the applicant fill out a form when seeking employment, or at least be able to sign his name. In short, it appears that a minimum degree of literacy is required. If the requirement is waived at all, it will be for an unskilled laboring job.

Outside of the textile industry, companies in paper manufacturing, petroleum, metal, chemicals, and others have established minimum educational requirements varying from a low of fifth grade (basic literacy) to high school graduation for semi-skilled and particularly for skilled positions, or for trainees. There were repeated references in the replies to the effect that the minimum standards which had been established were adjusted downward when the labor market failed to produce the required numbers.

A wide difference is found to exist in the elaborateness of the personnel practices which are followed in hiring new personnel. One estimate, provided by a consulting engineering firm, claims that only half of the textile mills in the country automatically screen persons seeking employment. At the other extreme is the burden of the replies received from the Charlotte Personnel Association which indicated that ten out of its thirteen members used not only application blanks, interviews, referrals, and physical examinations routinely, but also employed psychological testing as a standard procedure in hiring. However, except for the large companies, Southern industry does not today make as extensive use of psychological testing as do the Northern concerns.

One important type of "automatic screening" practiced by Southern industry is directly related to the employment opportunities of the uneducated. The color of a man's skin is crucial. If he is not white, he is automatically excluded from most industrial

employment except those jobs that involve nothing more than ordinary labor. There are exceptions, of course, some of considerable importance, such as the employment of Negroes in coal mining and steel manufacturing, but they are definitely exceptions. Only within very recent years has there been any clear evidence that the basic pattern of discrimination in employment may be undergoing some subtle, but nevertheless important, alterations which will increase the opportunities for Negroes in Southern industry.

There is some suggestive confirmation of the burden of the foregoing analysis to be found in a volume published in 1949 by William E. Noland and E. Wright Bakke, *Workers Wanted,* which compared the hiring practices in New Haven, Connecticut, with those in Charlotte, North Carolina. The authors found that in Charlotte only 12 percent of the employers had any minimum educational requirements for jobs involving common labor; 28 percent had requirements for production workers; 44 percent for skilled service and maintenance employees; and an understandably still higher percentage of employers required a minimum level of education for clerical and administrative personnel. The level of education required increased as the nature of the job became more complex: less than eight grades for common laborers; elementary school graduation or some high school for production, service, and maintenance employees.

The authors found also that many employers had preferences, if not firm requirements, respecting the educational background of potential workers. One of their most interesting findings emphasized that the educational requirements and preferences of employers in Charlotte were higher than those found in New Haven. The explanation for this could be sought in the fact that the employment opportunities studied in the South were limited to the type of jobs filled by white, native-born labor, while New Haven was adjusted to the presence of foreign-born persons who comprised 20 percent of the population. The Northern employers had to take cognizance of the fact that for the most part these foreign-born workers had had a small amount of formal education. This study reinforces the suggestion previously advanced that the level of education in the South, particularly in the urban South and particularly for the white population, has reached a point

where employers are able to set rather high educational requirements and expect to have them met.

There can be little doubt that Noland and Bakke are correct when they argue that the establishment of educational requirements for employment is a convenient mechanism for securing a rough estimate of the qualities and potentialities of an applicant, and is therefore a favored device of employers. The requirement is based upon a simple piece of objective information (though not always easy to confirm) and the answers can be quantified. The underlying assumption is that the more education an applicant has, the better employee he will be. Although we were cognizant that educational requirements had been established as an inexpensive screening device, we sought to elicit more detailed information about the ways in which Southern employers used it.

Specifically, we asked three questions. The first was, "To what extent do the jobs which most workers perform really require that they have some degree of formal education?" This question was directed to differentiating between the necessity that workers be literate in order to perform their specific assignments and the desirability that the working force be literate in order to facilitate the smooth operation of a large organization. The second question sought to elicit the significance of this latter factor: "To what extent are minimum educational requirements, where they exist, based upon the belief that they facilitate the adjustment of labor in general—the ability of employees to fill out complicated forms, to figure their pay, to understand various clauses in their work agreement—rather than to meet the specific demands of the work itself?" We recognized that in many cases it would not be easy to differentiate sharply between these two questions, but nevertheless the distinction appeared to have merit. The third question sought to elicit the extent to which "any firms provide special education for the illiterate, so as to enable them to be promoted to more difficult work."

We shall consider the textile industry first. The president of one of the large consulting engineering firms for the textile industry wrote:

> In my opinion less than 50 percent of textile jobs as they are practiced today require formal education beyond the ability to read

and write. However, workers with a high school education generally perform at a higher level and seek improved working conditions.

I believe that less than one-fifth of the mills in the industry which have minimum educational requirements in effect use them on the basis that they will facilitate the adjustment of labor, etc. I do not know of any cases where the workers are unable to at least satisfy themselves as to whether or not the pay is correct. The only exceptions are where bonuses and complicated formulas are used.

The vice-president of a company with many mills in the South stated that in his opinion, "minimum education requirements, to the extent that they are used, are based on the premise that they facilitate the adjustment and versatility of labor in general, rather than aid the specific demands of the work itself." An industrial relations expert employed by another very large group of Southern mills commented as follows:

Most jobs in our plants do require some degree of formal education, although on totally unskilled jobs where a person performs nothing but manual labor, the amount of formal education such persons have is of little importance.

The average worker employed in our plants is a reasonably intelligent person. He seldom encounters any problem in figuring his pay, the conditions of work, and such other matters. Those that lack a high level of formal education usually compensate for this through sufficient native intelligence.

A fabric manufacturing concern in North Carolina, interpreting the term "formal education" as high school education, indicated that in the "actual production segment about 30 percent required a formal education. In clerical, mechanical, engineering, etc., it would probably run to 100 percent." It is interesting to note the presumption that the "some degree of formal education" in our inquiry was interpreted to mean high school education. This respondent went on to say:

In practically all cases the main reason [for minimum educational requirements] is the specific demand of the work itself. It is, of course, natural for the employer to want to obtain a more educated labor group from all standpoints, including their ability to interpret and to understand policies of the company as well as policies of the nation.

These replies from a group of textile and fabric manufacturers reflect their experience in dealing with a working force, which, with few exceptions, has at least a minimum degree of literacy. It is very difficult for them to work out specific reasons as to the value of having literate employees. In general, their replies suggest that it is helpful directly on the job and, less specifically, in the over-all adjustment of the worker within the organization.

A Texas oil company wrote as follows:

> A high percentage of jobs in the oil industry require the employee to be able to read and write and do simple arithmetic. There is little opportunity for advancement in any branch of the industry without the ability to read and write.
>
> Our experience with illiterates is too meager to arrive at a conclusion on this question [of the relation of minimum educational requirements to general adjustment]. However, many company publications are slanted to employees for the purpose of communicating many things; for example, explanation of benefit plans, explaining policy decisions, etc. And it is a fair assumption that employees who are unable to read cannot be as well informed about the company as employees who are able to read the various communications that the company sends out.

The general employment manager of a very large metals company with plants throughout the South commented that "probably 50 to 75 percent of production jobs do not actually require formal education, however ability to read and write and understand and interpret written instructions facilitate the development of an efficient work force." The service manager of a powder manufacturing plant stressed the fact that "all industry depends on advancement through training. Little formal education limits the advance possible for such an individual." An official in a Virginia engineering company stated:

> In our industry any job above the so-called "bull gang" work requires that a man has some formal education. This enables him to take written instructions as given on blueprints or detailed construction work in the various phases of our actual fabrication and production.
>
> Our employment is based entirely on a man's ability, rather than

his education, his education being something that will increase his ability and effectiveness in our work.

What about the experience of employers in other sectors of Southern industry? The general personnel director of a South Carolina paper company, who advised us that he does not normally hire illiterates, went on to explain his policy in these terms:

This policy is not based on a belief that illiterates cannot do many of the routine jobs which we have because we know that literacy and intelligence are not synonymous. There are other factors beyond actual job performance that determine an employee's suitability in our organization. As you mentioned, there are the various forms, such as tax reports, insurance applications, application blanks, etc. that employees must be able to cope with, or otherwise aid must be available or provided. More important, however, we believe that communications within the organization are facilitated when employees are able to read our company's house organ, management announcements, employee handbooks, and bulletin boards.

A Georgia petroleum executive answered the question as to whether most workers require some degree of formal education in order to do their job with the comment:

It is required to a great extent in the newer, more technical installations. It is no longer a question of formal education in the South, but the extent of the formal education, as everyone under twenty years of age has considerable formal education.

It would be helpful if all employees could fill out complicated forms, figure their pay, and understand various clauses in their working agreement (it is difficult for many college graduates, except legal, to do this). However, I do not believe this carries much weight with any firm that has minimum educational requirements. In our own case the purpose of setting a minimum formal education requirement is so that we may have a bigger and better backlog of personnel which we can train and on which to build for the future. With our very strict policy of promotions from within, a minimum education requirement of at least the equivalent of a high school education, and preferably a formal high school education is necessary.

A consultant with wide experience in Southern industry emphasized the fact that "of course, illiteracy always acts as a handicap

to employment advancement, where the reading of blueprints, the making out of reports, and the keeping of some kind of books are necessary." He then went on to philosophize in terms of his own standards about another aspect of the problem as he sees it:

Only in isolated cases does the employment of considerable numbers of illiterate people create the feeling of either subservience or social inferiority. A large part of the illiterate Southern population do become tools of union organizers due to the fact that they have actual contact with the organizer and the union official, and not the education or understanding to quickly see through wholesale exaggerations or naked untruths. The story of the employer is seldom heard and the truth about the employer practically never heard so far as the illiterate people of the South are concerned. Therefore, the illiterate accepts flagrant and untruthful propaganda more quickly than the educated people of the South do.

After a discussion of our several questions the Personnel Directors Association summarized its position as follows:

Today it is necessary for most production workers to be able to read and write because it is necessary for them to be able to read production tags and record information on these tags or similar items. Then, too, companies like for them to be able to read bulletin boards, publications, etc. so that they can keep them informed on items pertaining to their jobs. Industries through their personnel departments are today making tremendous efforts to keep employees informed because we feel it is our duty as American citizens to do this in order to keep down confusion and combat Communism so that we can do a better job.

We find that, although they don't realize it, many companies give considerable weight to minimum educational requirements so that employees can adjust themselves to their jobs after hiring and the fact that they are required to fill out application forms in a great many companies in their own handwriting is proof that this is given consideration.

There are certain types of jobs, such as yard work, janitors, etc. where educational requirements are seldom required. However, industry today is meeting the situation by doing a better job of indoctrination and being willing to discuss any question an employee wishes answered.

The replies to the questionnaire distributed by the Charlotte personnel administrators group provided the following information. Eight out of twelve companies indicated that they had jobs which illiterates could perform satisfactorily, but only one out of thirteen believed that illiterates could be used effectively in the type of work that hourly employees usually perform. Six out of eight stated that they had educational requirements because of the advantages that an educated worker had in making a general adjustment, rather than because of the importance of education for the work itself. This finding contradicts the earlier reply that education is necessary for most hourly workers. Six out of twelve companies indicated that they had encountered difficulties in employing the poorly educated. In nine out of eleven companies the employers felt that the majority of their rank and file employees need to be able to read working agreements; about half of the companies said that their employees had to write reports now and again; and about half estimated that it was desirable for their employees to be able to calculate the amount of time which they had worked. Eight out of twelve said that it was essential for most workers to be able to calculate the units of work which they had performed.

The picture becomes a little clearer. There are relatively few illiterate workers in Southern industry, and there continues to be a definite downward trend because of the retirement or death of the older workers. The younger ones, with few exceptions, have had the benefit at least of a basic education. Southern industry is reluctant to offer employment to illiterates because of the requirements of the job; the additional problems encountered in assimilating them into the organization; and, finally, because this handicap precludes their promotion to more important jobs which definitely require literacy. The following is a summary provided by one employer of the difficulties encountered with illiterates:

> A poorly educated individual is unable to cope with sales involving state and federal taxes. It is impossible for such a person to handle the system necessary in retail selling.
>
> An illiterate worker couldn't understand benefit programs, particularly insurance, etc.

We have had cases of mixed yarn and other errors because employees could not read production tickets.

We have had a policy of long-standing of disciplining employees who fail to report accidents the day they occur. The first offense of this kind results in a three-day lay-off. This rule is posted periodically on the bulletin board. A lady in her late fifties failed to report an accident; consequently she was given the customary discipline. She filed a grievance claiming she cannot read, therefore she shouldn't be held responsible for knowing about the rules.

Management cannot intelligently discuss company policies and company problems, nor can the poorly educated individual have the intelligence to understand company policies, economics, etc. It is important that individuals employed in industry have a mental ceiling that will enable them to comprehend, understand, and analyze such information given out by the company or in discussional sessions.

A man was recently demoted from slasher tender helper to sweeper because he could not read or write. Other sweepers protested because the man had more seniority than any of the sweepers. Sometimes we have to lay employees off because of illiteracy after jobs are rearranged or combined.

An assistant overseer was changed because he could not fill out reports properly. A man was transferred to the supply room before it was realized that he did not have education enough to keep stock records and make up orders. Another case was where a janitor had to be discharged because he could not read well enough to deliver inter-office mail.

The replies received to the question whether Southern industry provides special education for illiterates reflected the fact that the problem is now largely of historical interest. There is no doubt that progressive mill owners have taken a considerable part in developing schools in their communities, but increasingly education is more and more a public responsibility. However, an occasional company is still concerned with contributing to the education of its working force. One large textile concern stated, "Although we have no planned program, classes are occasionally arranged in cooperation with local school officials to provide basic educational training for illiterates." This same company has a policy of paying one-half of the cost of certain correspondence courses. Especially in larger communities, employers are able to

suggest to their workers that "they take advantage of the public school system which has educational facilities for working people. This educational facility is available at no charge at night." While most of the respondents indicated that they did not provide special education for illiterates or defray tuition costs for those taking courses elsewhere, there were two companies which indicated that they did assist workers who were desirous of securing a minimum education in order to facilitate their adjustment to their job and to the community.

The replies contained answers, not only to the specific questions which we had raised, but in a considerable number of cases indicated the respondents' general evaluations of the relation between Southern education and Southern industry. The employment manager of a metals company indicated that he had never compiled information concerning the educational level of his production employees. He went on to say that he was also in no position to determine definitely the relative efficiency of the work force of his plants located in the South and those located in other sections of the country. He concluded, however, that "most of our officials would be of the opinion that there is no appreciable difference in the efficiency of employees in various areas."

Much the same relaxed attitude is reflected in the comments received from one of the large Texas oil companies. The point was made that illiterates among the work force do not present a problem in this company, for it operates in areas where the schools are attended by youngsters of all races and colors. The writer went on to comment that "undoubtedly much has been done in this connection in the last twenty years, and company interviewers say that an illiterate applicant for employment—even for a labor job—is most unusual. Twenty-five or thirty years ago many of the Latin American people were illiterate, or practically so. That is much less true today and most such individuals have full opportunity to obtain grammar school, and even high school education."

The summary evaluation of one of the largest textile concerns with plants throughout the South was to the effect that "the educational levels of Southern workers in the areas in which we

operate have not presented any major problem for us. In fact we feel that the average worker in our plants is generally superior to those in similar occupations in other parts of the country."

The most belligerently positive and optimistic formulation was put forward by a Georgian industrialist, who contended that illiteracy in the South was no longer a problem with respect to the younger white population but related primarily to Negroes and older people:

> Only this morning I was talking with an executive of an oil company that maintains large offices throughout the United States and does a nation-wide business. Some of the men in this company, who had recently been transferred here, were amazed at the high type of applicants and the high intelligence generally throughout the South as compared with their northern operations. I have heard many others—particularly some of the textile people who have moved from the New England States to the South in the last two or three years—express the same thought.
>
> The South has made tremendous advancement in its educational facilities during the last fifteen or twenty years. The days of the log cabin are past; the days of the one-room schoolhouse are past. In the thinly populated rural areas, such as we have in certain sections of Mississippi, Georgia and Louisiana, they have gone to a consolidated school system, whereby schools up-to-date and modern in every respect are built, with ample recreational and laboratory facilities. Children are picked up in school buses at County expense and transported to and from school. Our school facilities in the rural areas in the South are, I believe, equal to the rural schools in the North and Midwest. It is true the South's colored schools in the past have not had the same standards of facilities as the schools for white students. That, too, is understandable. These standards were based on the degree of appreciation of education and mental ability to absorb the education. This standard is rapidly advancing under its own impetus. Just how much advantage will be taken by the colored people of the higher standards is a moot question and only time will tell; however, if you can judge the future by the past, it is reasonable to assume that the same advantage will not be taken by the colored people as by the white. This is because of the fact that the colored race measures its standard of living more in terms of pleasure and leisure rather than accumulation of wealth. Certainly the colored people have ample opportunity in the skilled trades. Several skilled

trades, such as bricklayers, are monopolized by the colored people—the difficulty is getting them to work steadily. It seems that once they have enough money to last them for a week or two they go fishing.

Rapid industrialization of the South in the last two decades and increasing complexity of processes, for example, pipelines, atomic energy, chemicals, paper, etc., make educational levels of the working population of greater and greater significance. This as opposed to former main reliance on low or semi-skilled labor used in textiles. Take our own case, for example, and I am sure it applies to many other types of industry—our operations are very complex. We have invested capital per employee of approximately $150,000 to $160,000. We, therefore, require high types of individuals, as the responsibility of the jobs is great and consequently high wage levels make it impossible to consider the use of illiterates in any of our positions. The illiteracy problem here, as I see it, is (1) with Negroes, the bulk of whom are not industrial employees but small farmers, and (2) old people who did not have the educational opportunities now available. Therefore, the current illiteracy problem, if any exists, is not in areas of industrial employment at all.

The foregoing reflects the opinion of that sector of Southern industry where wages and working conditions have been such that its companies have been able to draw out of the labor market workers who were literate and whose general performance has been the equal of, if not superior to, workers in the older industrialized regions of the country. But it would be well to indicate that the problem of obtaining competent workers still remains, even though it may be diminishing. The following excerpts are from a confidential report of conditions in a predominantly agricultural county in one of the Southeastern states, with a total population of approximately 10,000, almost equally divided between Negro and white. The people in this county had been forced to contend with the serious economic conditions precipitated by the boll weevil during the thirties, and it was not until the latter part of the decade that there was any industrial employment available to them except in minor lumbering operations. In the late thirties clay mining began.

The report indicates that the educational system is handicapped because the buildings are in a bad state of repair, and one of the three high schools has been dropped from the accredited list be-

cause of a decrease in enrollment. Over the past ten years the average graduating class has had approximately fifty students, and less than five per year have entered college. It is estimated that less than 50 percent of the students go higher than the sixth grade. The report states:

> Prior to the enforcement of the school attendance law, the primary problem of educators in the county was to keep the students in school—in grammar school as well as in high school. The parents of the children have shown very little interest in whether or not the students attended school. The farmers especially needed the work of their children in making the crop and they gave no cooperation to the school officials. The enforcement of the school attendance law in recent years has improved this situation considerably, but it's still far from being rigidly enforced. The county can afford only a part-time visiting teacher or truant officer, and it is difficult for one person in a part-time job to be very effective in the entire county.

One of the clay mining companies which employs more than 500 workers estimated that the average educational level of its workers is below the fifth grade. The majority of the white workers are utilized as truck drivers, tractor operators, and machine operators. Some time ago the company, in cooperation with a neighboring vocational school, began classes for adults in order to expose as many men as possible to some formal education. "The men were not interested enough to attend the classes and the plan had to be dropped." Practically all the men in the laboratories and highly skilled occupations have been brought into the county. The local high school graduates did not have sufficient chemistry, physics, and mathematics to enable them to handle the more skilled jobs. The local schools do not have laboratories for use in instruction in these courses. During the past year this plant has experienced considerable difficulty in obtaining skilled workers, who heretofore had been brought into the area from the outside. A plan was put into effect to train local men for these jobs. Originally twenty-five men were selected and given three tests: one was a general personnel test and the other two were mechanical aptitude tests. Of the twenty-five tested only three made barely passing grades. The remainder scored grades which ranged downward to a point below measurement. The tests were withdrawn, and supervisory

personnel selected a group of men to be trained; no results are yet available.

This company reported that the men who were utilized as truck drivers and machine operators require constant supervision and are able to perform only routine jobs. Equipment is costly to operate. The company cannot instill in these men a feeling for necessity for proper maintenance. Many examples were cited of the men permitting the motors in trucks and tractors to burn up because a fan belt broke or because there was no water in the radiator. Instead of stopping and looking for help, they quite often continued to run the vehicle until it stopped.

It is hard to generalize even about this county. The other major employer, also engaged in the mining and processing of clay, had better experience with his work force. Although he, too, at first, brought in key personnel from other areas, many of the original mine workers have been trained as machine operators in the plant and are satisfactory. "Most of these workers were taught to read and write by the company sufficiently to make out simple reports which required only notations on a regular form of temperatures, time, and quantity flow." The management has gone to considerable pains to train men for the jobs that they can perform best.

No instance was found in either plant of a man with a low educational background who had ever had any degree of success in lifting himself above the average of the group. No one from the county had developed into a key employee. The educational system and training that is available in the county is familiar to all the citizens and is more or less accepted as it stands by most of the taxpayers. After World War II an attempt was made to start adult academic education classes for the white and the Negro veterans. A few of the leading citizens have tried on numerous occasions to start movements that would improve the schools and attract more qualified teachers. In each case these attempts have met with failure, because the population as a whole does not want taxes raised for the purpose of improving schools. Several years ago a plan had progressed to the point where bonds were to be issued, but a group of citizens secured a court injunction and the money already collected had to be refunded. The general attitude of the majority of people in the county is that "the school was good enough for me

and it will have to do for my children." The County School Superintendent is a little more optimistic that the school attendance law and the minimum foundation program recently enacted in the state will result in an improved educational system.

Clearly, the extremely optimistic point of view held by the petroleum industrialist that low educational standards are no threat whatever to the productivity of Southern industry is not supported by this analysis of conditions in a rural county with a weak agricultural base. Poor schooling was very definitely reflected in the problems encountered by the two mining and processing companies in recruiting and training local labor. But even here the evidence is not overwhelming. With some extra effort, one of the companies was able to meet most of its urgent demands. To a considerable degree the problems of securing an adequate work force within this rural county may have reflected the fact that during the years a considerable number of the population have moved to neighboring regions and to Northern cities where employment opportunities were better.

The burden of the evidence is clear. Most industrialists in the South were unconcerned about the educational background and the general qualifications of their workers. This lack of concern showed that the demands of industry were being met by the Southern worker. Apparently, Southern industry, although it has been expanding for several decades, and has expanded very rapidly during the past decade, has lagged behind the expansion of Southern education. More people have been going to school than have been required to man the expanding industries of the South. This fact explains two contradictory phenomena: the general satisfaction of Southern management with the educational background of its working force; and the great difficulties which the poorly educated and the uneducated have found in making a place for themselves in Southern industry.

CHAPTER 10

THE UNEDUCATED MIGRANT

SOUTHERN INDUSTRY has expanded rapidly, but this expansion has not contributed directly to opening employment opportunities for the masses of uneducated who were born and raised in the South. We saw that the expansion of the Southern educational system, particularly at the lower level, has outdistanced the economic advance of the South. The result is that Southern industry has been in a buyer's market as far as the educational qualifications of its workers are concerned. The expansion of industry in the South has brought with it a higher income level, which in turn has led to increased employment opportunities in non-manufacturing manual occupations and in the service trades. A considerable number of the uneducated who were drawn off their farms, their original base, found a niche for themselves in manual employment and in the service trades. Apparently these new opportunities have not been adequate to absorb all of them, however; the opportunities outside the South were more attractive. At any rate many were willing to migrate to the North and West.

The patterns of migration within the South and out of the South have been complex, but for the purposes of this study a few generalizations can set the background. Many have moved from a Southern farm into the urban communities of the South. There have been two routes out of the South—directly from the farm and secondarily from the Southern town and city. It should be noted that on the average the more education a man has, the more likely he is to migrate, and the further he is likely to move.

But every group participates in large-scale, sustained migrations such as that out of the South since 1940.

This chapter will seek to round out the picture of the uneducated in contemporary American life by sketching the major facets of the problem in other regions of the country. The problem is in part a direct outgrowth of the migration of Southerners and in part reflects unique conditions, such as the Mexican in Texas and the Indian in the Southwest. For purposes of continuity, we shall deal first with the Southern migrant to the North.

The degree to which Americans are mobile is reflected in the fact that in 1947, 70 million persons were living in homes other than the ones in which they had lived in 1940. During this same period 13 million had moved to another county within the same state, 5 million had moved to a contiguous state, and 7.5 million had migrated to a non-contiguous state. If a migrant is defined as a person who has changed his residence from one county to any other, the total number of migrants between 1940 and 1947 was in excess of 25 million. One out of every five persons in the population was a migrant.

The South was conspicuous in two regards. It was characterized by the highest internal migration of any region in the country. Secondly, it had the largest out-migration. Almost 3 million persons who had been living in the South in 1940 were living in other regions in 1947. Because illiteracy has been particularly pronounced among the Southern rural Negroes, special note must be taken of their migration patterns over the past several decades, particularly since 1930.

In 1940 the Census revealed that just under 11.5 million living Negroes had been born in the South, and of this number slightly under 10 million were living in the South at the time of the Census. Thus, 1.5 million Negroes born in the South had migrated to other regions of the country. Almost 800,000 Southern Negroes were living in the North Central states and 700,000 in the Northeastern states. More than 100,000 Southern Negroes had moved to the West. The import of this Negro migration is indicated by the fact that over 50 percent of the total Negro population in both the Northeast and the North Central states had been born elsewhere—in the South.

Further evidence of the scale of Negro migration is manifested by the large gains and losses in individual states. Between 1930 and 1940 New York gained over 300,000; Illinois and Pennsylvania over 200,000; Ohio, Michigan, and New Jersey, over 100,000. Florida was an exception in the South; it, too, gained over 100,000. These gains were at the expense of the losses of various Southern states, in particular Georgia and South Carolina, each of which lost over 300,000 Negroes; Mississippi, Virginia, and Alabama, each of which lost over 200,000; and Louisiana, which sustained a loss of over 100,000.

The most striking migration both within the South and out of the South occurred in the decade of 1940–50. In 1940 the total Negro population numbered slightly less than 13 million, of which about 3 million were in the North and 10 million in the South. In 1950 the total Negro population was 15.5 million, with slightly more than 5 million in the North and 10 million in the South. Thus, within a single decade the North increased its share of the total Negro population from less than a quarter to more than a third. In both 1940 and 1950 Negroes living in the North were almost exclusively urbanites: nine out of every ten lived in a city. In the South in 1940, however, two out of every three Negroes were living in a rural area. By 1950 the movement off the farm had been sufficiently pronounced to result in an almost equal distribution: 47 percent urban, 53 percent rural.

Although there are no detailed figures yet available about Negro migration between 1940 and 1950, some estimate can be made of the changes in the distribution of the total Negro population which are primarily the result of migration. California and New York gained during the decade more than 300,000 Negroes; Michigan and Illinois gained more than 200,000; and Pennsylvania and Ohio gained more than 100,000. In California and Michigan the 1950 Negro population was more than 100 percent above the 1940 base. Eight Southern states showed a loss in Negro population during this same period. Mississippi and Arkansas lost more than 50,000; Texas, Oklahoma, Georgia, and Kentucky, between 40,000 and 10,000; and West Virginia and Alabama, about 2,500 each. Another way of emphasizing these regional and state changes is to call attention to the fact that while the Negro population in the

United States as a whole increased 15 percent during the decade of the forties, Negroes in the North increased 46 percent; in the West, 79 percent; and in the South, 2 percent. With the exception of Maryland, Delaware, and Florida, no Southern state showed an increase in Negro population greater than half the national rate. Since the birth rate among rural Southern Negroes is very much higher than among Northern urban Negroes, these regional and state differences are certain to reflect, in the first instance, migration from the South.

We stated earlier that the more education a man has, the more likely he is to migrate and the further he is likely to move. The vast number of migrants includes, nevertheless, a substantial percentage of poorly educated persons. Between 1940 and 1947, for example, nearly 10 million people over twenty years old moved to another state. Of these over a third, about 3.3 million, had completed eight years of school or less.

SOUTHERN MIGRANTS IN THE DETROIT AREA

Against this general background of large-scale migration out of the South, it is desirable to sketch some of the problems encountered by an illiterate or poorly educated Southerner when he seeks employment in one of the large industrial centers of the North. We have just presented figures to show that between 1940 and 1950 the state of Michigan had an increase of about 235,000 Negroes, which put the Negro population at 109 percent above 1940. The gain in total population, white and Negro, amounted to more than 1.1 million during the decade, or 21 percent. Michigan gained in population more than any other state in the Northeast or the North Central regions.

From time to time when the automobile industry expanded rapidly and the local labor supply proved insufficient the larger companies used to send recruiters into the border states in search of new labor. During World War II restraints were placed upon these recruiting practices in order not to confuse still further an already very much confused labor and community situation. However, long before the War Manpower Commission succeeded in restricting recruitment in favor of a more orderly system of registration, referrals, and transfers through the Federal Employment

Service, large numbers of migrants had come into the Detroit area either under their own momentum or in response to specific recruiting efforts. During the post-war period there were no striking increases in the local demand for labor and, hence, no large-scale in-migration. However, with the expansion that took place after Korea a considerable if much smaller number of migrants than in World War II again sought employment in Detroit. Many of these migrants came from the border states and from the deeper South, and a considerable number of them were illiterate, or at best had very limited knowledge of reading, writing, and simple arithmetic.

The following picture of the uneducated Southern migrant in the Detroit area was developed on the basis of a visit to the city which included discussions with informed persons in industry, labor, and government in the spring of 1951. At that time the big three—General Motors, Ford, and Chrysler—were hiring very selectively and were making practically no use of the State Employment Service, where migrants in the area usually first appear in search of work. A review of a random sample of the cards filled out by the migrants at the local offices of the Michigan Unemployment Commission indicated that many persons in search of employment were at best only semi-literate and had to seek the assistance of the staff to fill out the required forms. The State Employment Office found that when they referred uneducated migrants to one of the smaller automobile companies which was currently expanding its force, the men were not accepted for employment. They would bring their cards back stamped "illiterate." Only if the labor market were very tight would the smaller companies relax this barrier against the illiterate, and then only if a man was at least able to sign his name. They would in that case permit a friend to fill out the detailed application blank for him.

Although the barriers against the industrial employment of illiterate workers in the Detroit area at the present time are very high, an informal survey indicated that a considerable number of illiterate workers are currently employed by the automobile industry, even by the major companies. For the most part the illiterate and poorly educated workers are in the foundries. Since most other break-in jobs can also be learned within a few days,

surely within a week or two, and since the limited training which a new worker receives is primarily oral or by demonstration, the reason for the barriers against the hiring of illiterate workers is not self-evident. Yet they are not irrational.

Industry is making use to an increasing degree of written job orders to prevent misinterpretation. A large number of jobs, even many at a relatively low level, require the employee to keep one or another type of record. A company does not like to reduce its flexibility by hiring a man, even a simple machine operator, who cannot be shifted to a job requiring a knowledge of reading and writing. But perhaps the most important source of the disinclination to hire the uneducated relates more to general adjustment within the plant rather than to their specific work performance.

One of the major automobile companies estimated that during a man's first three months on the job he would be required to fill out about thirty different forms. Since most of the work force is able to read and write, the management no longer provides the special services required by illiterates. Another interesting illustration of the difficulties of absorbing a relatively few illiterates within a predominantly literate working population are the adaptations used by the illiterates to cope with the situation. Unable to read his name, the illiterate worker may deface his time card in a manner to permit him to identify it readily; yet any defacement may make it impossible to process the cards by machine. It was also found that workers who are unable to read are more suspicious about management's decisions, particularly when temporary layoffs take place. They insist that the Personnel Department review the relevant clauses of the contract with them and even then continue to worry about not being treated fairly.

Supervisors who had the most direct contact with illiterate workers considered that they were much more likely to run into difficulties in managing their lives outside of the plant and that some of these difficulties would be reflected in the shop. For instance, some illiterate workers had bought on an installment plan various expensive items such as bedroom suites, television sets, or refrigerators. They often failed to estimate correctly the required weekly or monthly payments, and when they fell behind in their payments were threatened with the loss of an item on which they had made

a considerable investment. Some workers stayed away from work in an effort to borrow funds or to negotiate with the collecting agency. In a few cases illiterate workers had signed agreements which permitted a creditor to garnishee their wages, a practice which, although legal in the State of Michigan, the employer does not like to abet.

In general, these illiterate Southern migrants were considered undesirable employees, not because of their illiteracy alone, but primarily because they had other traits which made them undesirable. The charge was repeatedly made that these migrants had an excessive absentee rate—that they would go back South at the slightest provocation, when a relative was sick or in trouble, for the birth of a child, or just because they were homesick. In any large group of migrants, there are some who find it difficult to adjust to the new environment. Some have to leave home because of a scrape with the family or the community; others are carried along by more aggressive relatives or friends who are determined to migrate. When confronted with the multiple difficulties of changing their pattern of life from subsistence farming in the Appalachian hill country to industrial employment in Detroit, a considerable number found the adjustments too burdensome and therefore returned home at the slightest provocation.

Others were considered undesirable because they failed to demonstrate any strong motivation on the job. This judgment, made by Northerners, may well be a misinterpretation of the migrants' attitudes and behavior. Human beings have a limited capacity to adjust to the new and the difficult. The Southern migrant, who had to find living quarters, learn how to shop, adjust to transportation schedules, and make new social ties in a strange community, may well have had little capacity to do more than meet the minimum demands of the job. Even these minimum demands were very substantial for one who had never before held down an industrial job.

This view may help to explain two additional charges that were frequently leveled in the Detroit area against Southern migrants. Several officials, both in management and in the trade unions, commented that, while many of these migrants were excellent workers on particular jobs, they strongly resisted any effort to put

them in a new work situation. However, when one remembers that they had only recently gained mastery over one set of operations, it is not surprising that they resisted learning another. The frequent charge that the migrants, particularly the illiterate or semi-literate group, had little or no interest in increasing their education may well reflect the fact that they were already overwhelmed by the complex adjustments which were required of them on and off the job.

No special study has ever been made of the adjustment of illiterate migrants in Detroit or other Northern cities. The conventional study usually collects information about the educational background of the migrants in order to compare it with the educational level of the Northern work force. The data always reveal a sizable gap between the average number of years of schooling of the local population and that of the migrants.

The cessation of substantial immigration from Europe and the constant raising of the educational standards in the North have resulted in less and less tolerance of illiteracy on the part of Northern employers. When tens of thousands of immigrants from Central and Southern Europe were entering the country annually, Northern industry accepted and adjusted to the fact that many workers would not be able to read and write English. But only a small number of illiterates now remain in Northern industry. Today illiteracy is viewed as a personal handicap, frequently because no distinction is made between it and other undesirable qualities which characterize the underprivileged.

Those who have had most to do with the large number of Southern migrants who have come into the Detroit area over the past decade are impressed with the fact that, after the initial adjustment characterized by high absenteeism and other undesirable behavior, those who remain settle down quickly and before long transform themselves into good industrial workers. The exceptional confusion and turmoil which prevailed during World War II has left an unfortunate impression. Few are willing to acknowledge that the responsibility was not the migrants' but that of the local community and state and Federal governments which failed to meet the tremendous social challenge that full mobilization brought in its wake.

During the past decade the opportunities of the illiterate to find employment with the larger companies have been further reduced by two important developments. First, management has become increasingly conscious of the costs of poor selection, costs reflected in wasted training, high rates of spoilage, and labor turnover. Second, as unions have gained strength, it has become more and more difficult for management to discharge employees who survive the probationary period, which has now been reduced in most industries to ninety days and in a few cases to as low as thirty days. If management and the union disagree about the discharge of an employee, it can lead to months, even years, of hearings before an arbitrator, and the costs for management alone can reach $20,000 for a single case. Unless there is a very great need for labor that cannot possibly be met from local sources or from among the better educated migrants, it is inevitable that the large companies will be increasingly cautious about hiring men with obvious handicaps, such as an inability to read and write with reasonable fluency.

SPANISH AMERICANS IN THE SOUTHWEST

Although we have concentrated up to this point on an analysis of the Southeast, we have had occasion to call attention to the fact that there are significant pockets of poorly educated or totally illiterate persons in other sections of the country, notably in the Southwest. It is estimated that there are approximately 2.5 million Spanish Americans in the Southwest, of whom about 1.5 million are in Texas, where they comprise approximately one-sixth of the total population. With their number constantly augmented by legal and, especially, illegal immigration, and set off from the rest of the population by cultural, linguistic, religious, and other differences, the vast majority of this group has been poorly integrated into the dominant culture. From many points of view the problems are similar to those found to exist among Southern Negroes: poverty; very low educational level; racial discrimination in employment practices; and heavy concentration in agricultural labor or in the least desirable jobs in industry or in the service trades. The Spanish American is even more handicapped than the Negro because of his language and cultural differences. But he has one

advantage: the racial barriers which separate him from the white population are not quite as rigid or as ubiquitous.

In studying the rejection rates for military service during World War II, we found that the counties in southern Texas which border on the Gulf of Mexico and Mexico proper had very high rejection rates. We suggested this could be explained by the presence in the population of large numbers of Spanish Americans who were more or less illiterate in English. The map in Chapter 4 indicates that there were thirty-eight counties in Texas where the rejection rates for mental and educational reasons were at least 20 percent. It is interesting to note that in all but three of these counties, at least 30 percent of the children were "Spanish-speaking." Of the five counties with the highest rejection rates—over 40 percent—two showed more than 90 percent of all children to be Spanish-speaking, and in none was this rate less than 70 percent. In six of the fourteen counties with rejection rates between 30 and 40 percent, 70 to 90 percent of the children were Spanish-speaking; in three counties, 50 to 70 percent; and in the remaining five counties, between 30 and 50 percent. There is no point in belaboring these figures, which permit only one conclusion—that very large numbers of Spanish Americans were rejected for military service during World War II because they were Spanish-speaking, a factor which the various screening examinations failed to take adequately into account.

These large-scale rejections for military service refer to the resident Spanish American population—the majority of whom were born in the United States—and not to the recent immigrants, most of whom entered the United States illegally. How does it happen, therefore, that these native-born Americans failed to acquire even a minimum literacy in English? Certain detailed information is available about Hidalgo County in the extreme southern part of Texas. This county had a very high rejection rate —just under 40 percent. However, almost three-fourths of the population is Spanish-speaking. A sample study reveals that more than half of the Spanish-speaking population had no schooling whatever, that 80 percent had less than five years of schooling, and 90 percent had less than seven years. Of those who had no schooling whatever and were over twenty-one years of age at the time

of the survey in 1949–50, it was found that seven out of ten had been born in Mexico. Perhaps the most important statistic is the average daily school-attendance which was only 28 percent of those enrolled. The explanation for this very low rate must be found in the heavy seasonal migration of this population. In each two-year period one out of every two families moves north. Apparently, they are dispossessed by the illegal immigrant who comes over the border at harvest time.

The economic level of these Texas counties is strikingly different from that found in most parts of the rural Southeast. Until large-scale state aid became available the rural counties in the Southeast had been hard-pressed to provide adequate funds for the education of either the white or the Negro children. In contrast, the three most southerly counties in Texas, Hidalgo, Cameron, and Willacy—all of which had very high rejection rates for educational deficiencies—had an average cash income per farm in 1949 of no less than $13,500. It must be remembered, however, that the prevailing agricultural wage for the illegal immigrant, the wetback, amounted to 25 cents per hour.

Most of the Spanish Americans who are long-term residents are concentrated in the towns and cities of the Southwest, but despite this urban complexion, they are underrepresented in heavy industry. Presumably a disproportionate number of them are forced to seek a living in service and trade. However, large numbers of Spanish Americans are found in light manufacturing industries, particularly leather, clothing, textiles, and furniture, where they form from a fifth to a third of the total labor force. These industries have for the most part the lowest wage scales. In industries which pay higher wages, such as transportation, equipment, petroleum, and chemicals, Spanish Americans usually comprise only between one and 6 percent of the labor force. A major exception is the primary metal industry, which is located where the Spanish-speaking population is concentrated; here Spanish Americans account for approximately a third of the work force. Wherever there are considerable numbers of Spanish Americans in the population, industry either avoids hiring them altogether or hires a number sufficient for grouping into separate departments or shops that work as independent units.

This cursory review of some of the problems facing the Spanish American population in the Southwest indicates that they suffer from a large number of handicaps, including the specific handicap of limited education and literacy. If they are to overcome the barriers which face them and adjust successfully to American life, they must acquire a knowledge of English. Hence, education can be said to play a crucial part in their adjustment process. We have presented enough evidence to indicate the need for rapid and large-scale progress on the educational front for this very large minority who live in the Southwest.

MIGRATORY LABORERS

It is estimated that there are currently about a million migratory agricultural workers within the United States. Except for those of Mexican descent, native whites are an insignificant proportion of the total. In addition to a few West Indians and Puerto Ricans, the migratory laboring group is composed of two major subgroups. The first are the Negroes, whose base of operations is Florida and who follow the harvests up the coast as far as Maine. Most of the members of this group are former sharecroppers who have been displaced as Southern agriculture has become increasingly mechanized. The other, and probably the larger, group consists of Spanish Americans, both natives of the United States and legal and illegal immigrants from Mexico. Their main base is Texas, from which they spread out during the harvest seasons as far as Washington and Michigan. For the most part the illegal immigrants work close to the border, but as we have noted earlier, their presence in the Southwest exerts pressure on others—legal immigrants and native-born Spanish Americans—to search for employment elsewhere.

Today's migrants are almost exclusively agricultural workers. This contrasts quite radically with the situation which prevailed at the outbreak of World War II when, it is estimated, as many as 4 million persons who had been cast loose by the depression had not yet established new roots. Unlike today's migrants who have reasonable assurance of finding work as they follow the seasonal route, these earlier migrants were true wanderers, perpetually in search of work. In assessing the military rejection experience of

World War II, it is important to recognize that the children of these earlier migrants had few educational opportunities. Most states, hard pressed to find revenues to educate their own children, revised their residency laws to deny the migrants most of the rights of citizenship, including the right to send their children to a free school. It is probable that the majority of the children of these earlier migrants did not complete five grades of schooling.

The migratory workers today, aside from the immigrants from Mexico, come from the most handicapped rural areas of the country and have had the least advantages in preparing themselves for life. They are truly marginal, unable to make a living in the areas where they were born and grew up and unable to gain a secure foothold in business or industry. The technological revolution which is preceeding apace in agriculture has made them surplus. In 1949 agricultural production was 27 percent greater than in 1940 with a labor force 8 percent smaller.

During the past two decades, except for the period of the war, the farm worker has found it increasingly difficult to obtain a full year's work. At the present time, of the more than 4 million farm wage-earners more than 2 million have less than 150 days work per year. Here is the reservoir from which the migratory farm labor force is recruited. Closely related to this decline in agricultural employment opportunities is the increasing seasonality of farm work. In the early 1930's some Southern states offered to farm workers in the lowest month of the year only three-eighths as much employment as in the highest month. At the end of the 1940's employment opportunities in the low month were reduced to only one-ninth of the peak. The explanation for this change is probably to be found in the replacement of animal power by tractors, which eliminates the necessity of caring for stock during the winter, and the intensified mechanization in the preparation of crops. Manpower is required primarily for harvesting.

In 1949 the typical migratory worker had seventy days employment on the farm and thirty days of casual non-farm work, for which he earned a total of a little more than $500. The migratory worker and his family were usually away from "home" for a period of four to six months in the year. When work is available, child labor is the rule; youngsters of five or six work. In 1949 there

were as many migratory boys seventeen years old or younger working for farm wages as there were men older than forty-four. Women and children account for more than half of the total days of migratory farm employment. When mothers work in the fields, the pre-school child must be left alone in the shack or brought along to the fields.

The obstacles to school attendance for these children are almost insurmountable. The migrant family leaves home before the end of the school year and returns after the beginning. Even if children were to attend school while the family is away from home, travel time and the constant changing of schools would have a serious effect upon the efficacy of instruction. In any case, they rarely attend school when outside of their home state, and frequently are absent when at home. While most states and localities no longer specifically exclude the children of migrants, few make any serious effort to compel school attendance. The determining factor is the attitudes of parents and children toward education. The need for the wages of the children, the general poverty of the family which prevents the purchase of adequate clothing and food supplies, the reluctance of the children to attend classes in which they are older than the others, and the social ostracism that usually meets the migrant—all contribute to the obvious result. On the basis of sample studies, it appears that only a small percentage of the school-age children of migrants actually attend school when they are outside of their home state, and those who do are usually between two to five years behind the resident children. It is indeed questionable whether the educational problem posed by the children of migrants can be resolved short of a successful attack on the problem of migratory labor itself.

THE NAVAJO INDIANS

The highest rejection rates in the entire country during World War II were found in the area of northern Arizona, New Mexico, and southern Colorado, which together with the southern part of Utah, is the home of the Navajos. Experts are agreed that the illiteracy rate among the Navajos approximated 90 percent at the outbreak of World War II. Up to that time very little effort had been made to develop an effective school system, and even today

seven years after the war, only moderate progress can be reported. As is usually the case when education is neglected, it is necessary to search not for a single cause but for a complex of factors. Prior to World War II the main explanation for the very high illiteracy rate among the Navajos was the basic lack of motivation among the Indians themselves. Parents saw no special reason for their children to learn English. At that time there was much less pressure than there is today for a Navajo to seek a living outside of the reservation. And within the reservation his native tongue sufficed.

Since the reservation is large, and the roads, where they exist, are poor, and since the shortage of water usually dictates that the Navajo have two homes—a winter home and a summer home, it is clear why even with very strong motivation, the Indian would encounter major difficulties in seeking an education. The road system is so bad that it is almost impossible to bring any large number of children from their homes to school and return them home the same day. Indicative of earlier attitudes of the population toward education was the rotation pattern followed by many families in sending children to school. If he had five children, a father might send one child to school one day and another child the next so that those who remained behind could take turns in shepherding the flock.

Despite the very high illiteracy rate, a certain number of young Navajos were taken into the Army during World War II. They wrote letters back which their parents were unable to read, and the parents in turn were unable to write to them. The teachers in the reservation schools acted as interpreters and in doing so were able to heighten the interest of the population in securing education for their children. When the soldiers came back from the war, they, too, talked to their kinsfolk of the importance of teaching the children English. This stimulus coincided with the continuing rapid increases in population and the increasing difficulties which many families encountered in earning a livelihood within the reservation. Clearly, successful adjustment outside the reservation depended in large measure upon a knowledge of English.

Despite the need of these people for schooling, one authority estimated at the end of the 1940's that "five-sevenths of all Navajo children (15,000 out of 21,000) are not enrolled in any school"

and that the 6,000 or so who are enrolled "attend makeshift schools which are materially and administratively unsound, inefficient, inadequate, and uneconomical." We have already noted why the day school is simply not a practical institution throughout most of the Navajo reservation. Recognizing this fact, such efforts as have been made have been directed toward the establishment of boarding schools upon the reservation. However, the capacity of these boarding schools is limited and the conditions in many of them are far from satisfactory. Here is the expert appraisal of the Fort Defiance School and Hospital: "The school dormitories here, as well as in other boarding schools are overcrowded. Usually crammed into the wards there are 50 percent more children than the Indian Service's own regulations allow! Sanitation, comfort, sound education can hardly be expected to thrive under these conditions. In addition, reservation dormitories are fire traps—wooden floors and stairways, makeshift fire escapes. . . . There isn't a single modern school dormitory in Navajoland. . . . Buildings condemned years ago are still in use."

Since the tuberculosis rate among the population is extremely high, overcrowding is hardly a mere matter of aesthetics. The Acting Commissioner of the Office of Indian Affairs, writing in the post-war period, stated, "It is equally conservatively estimated that the deaths of Navajos from tuberculosis per 100,000 is 380 compared to the rate of 40 per 100,000 for the rest of the population.

One teacher told us of the pressure on educational facilities, the limited capacity, and the small budgetary allowances: She was supposed to take care of approximately 500 children at a boarding school, which had a rated capacity of 70. Since the children were boarders she had to provide at least minimum medical supplies to take care of the large number of children who came down with infectious diseases and other complaints. The Government allowed her 21 cents per child for a boarder who ate all of his meals in the school, and 11 cents for a child who had but one meal.

In essence the problem is this, as the Indian Service pointed out some years ago and has repeated frequently: "The Navajos need more schools, and more opportunities for adult education; the Navajos need more doctors and more nurses; but equally impor-

tant, the Navajos need more and better opportunities to sustain themselves by their own efforts."

At first glance there does not seem to be much in common between the white or the Negro migrant from the Southeast who seeks employment in the Detroit area, the Spanish American of the Southwest, the migratory farm laborers based in Florida and Texas, and the Navajo Indians. And yet there is a theme common to all. Each group is confronted by the same problem. Each group has a background of farming where labor surpluses and underemployment prevail. Out-migration is the only possible solution. But migration is difficult because they lack education. Finally, the community they must join is a literate community which shows little hospitality to the illiterate.

PART III

HUMAN RESOURCES POLICY

CHAPTER 11

THE SCHOOL AND THE COMMUNITY

IN PART I, "Education and Society," we sought to delineate how the educational system had changed during the last sixty years in consonance with other changes in society and how, to a lesser extent, these educational changes had influenced the broad trends of social and economic development. In this historical review we paid particular attention to those regions of the country, and to areas within these regions, where the level of education has tended to lag far behind the national norm.

We discovered that the single most important component of the relatively low educational level in the South throughout the period from 1890 to date was the illiteracy of a large portion of its Negro population. Over the past fifty to sixty years, no other region has had to contend with so burdensome an inheritance.

The historical analysis also revealed a close relationship between rurality and below-average educational achievement, especially in the South. In addition to the unique problem of the Negro, the South also had to contend with the fact that so much of its population lived in rural communities connected with other communities only by very poor roads.

One of the most striking findings was the continuing rapid decline, throughout the entire United States and including the South, in the numbers of persons in agricultural employment, with a corresponding expansion in employment in manufacturing and

service industries. We noted that it was, nevertheless, exceedingly difficult for the total illiterate or even the poorly educated person to force his way into more desirable sectors of the economy. It was next to impossible for him to find a niche in the professional and clerical occupations, and there were serious obstacles to his securing employment in manufacturing, particularly in the South where he had to compete with the better educated for the relatively few industrial positions. The two exceptions to this generalization were the employment opportunities offered the illiterate in the South by the early cotton mill and, more significant perhaps, the opportunities offered migrants to the North when industrial centers there were very much in need of labor.

The rejections of younger men for the Armed Services on the ground that they did not possess the mental or educational achievements which would permit them to serve effectively during World War II were very heavily concentrated in the Southeast and the Southwest, particularly in the rural areas within these regions. In addition to the factors already alluded to which are usually associated with low educational level, such as rurality, isolation, and a high percentage of Negroes in the population, one other crucial factor must be included. This is the educational system, which is a reflection of the economic base on which it rests; where the base is weak, so is the system.

Just because so many of the signs of inadequate educational performance were found in the rural isolated sections of the South, there was little interest in the problem elsewhere. Some farsighted individuals and foundations with a national perspective recognized the necessity of offering the handicapped white and Negro populations of the South an opportunity to overcome the restraining factors of poverty, disease, and illiteracy, but such recognition was exceptional. The existence of the problem was revealed to the country as a whole at the time of World War I, when the Armed Services employed intelligence tests which revealed wide discrepancies in the performance of various groups and subgroups in the community and which indicated that the results for the South were particularly atypical. But the "return to normalcy" after the end of the war and the prosperity of the 1920's deflected attention from these findings; then the major depression of 1929–

33 and the continuing underemployment throughout the rest of the decade led the country to be preoccupied with the problem of its manpower surpluses. The study of the present and future productivity of the nation's labor force in terms of educational preparation was neglected.

World War II brought the problem into national focus for a second time. The manpower surpluses of the immediately preceding period disappeared rapidly and in their place there developed various shortages of manpower for military and civilian purposes. At the same time the Armed Services were rejecting hundreds of thousands of young men because of mental or educational deficiencies, and there were many other hundreds of thousands of illiterate or semi-literate registrants whom the Armed Services did accept only because of the manpower stringency. However, the military had to make a special investment in these men to raise the level of their literacy to the minimum necessary to integrate them effectively with the rest of the servicemen.

What implications do the facts and figures which have been presented have for public policy? In order to answer this question, it is necessary, not only to assess the historical materials which have been presented, but also to ascertain as much as possible about conditions as they exist today and are likely to develop tomorrow. The bulk of the materials around which this study has been built—the uneducated who were rejected or accepted for military service during World War II—reflects the educational structure as it existed around 1930. We have seen, however, that the outstanding characteristic of the entire period which we have had under review—from 1890 to the present—is the very rapid changes which have occurred within the educational structure. The changes have paralleled radical changes in other sectors of our life, as, for instance, the almost complete disappearance of European immigration since 1930 and the very rapid industrialization of the South since 1940.

It would not be safe, therefore, to base current policy on the circumstances of 1930, and it is even less safe to seek perspective on 1960 unless full allowance is made for the developments of the last twenty years. It is the objective of this chapter to provide the essential framework of major developments during the past genera-

tion and thereby provide a sounder base for recommendations. Policies with regard to the uneducated must be formulated in light of the present and future position and world responsibilities of the United States.

In presenting these essential facts the following structure will be employed. First, an effort will be made to estimate the scale of responsibility for educating the young which rests upon the South relative to other sections of the country. This will be followed by an estimate of the resources available to the South in comparison with other regions of the country to meet these responsibilities. Since there was still a considerable gap between the educational structure of the South and the other regions of the country in 1930, special attention will be paid to developments which have narrowed this gap in the intervening period. Finally, the burden of the evidence will be assessed to determine its implications for the formulation of public policy.

The key determinant of the scale of the responsibilities that face a community in providing educational services is the number of children of school age. One of the most revealing measures of the educational burden on a community, therefore, is the ratio of the number of children between the ages of five and seventeen to the adult working population between the ages of twenty and sixty-four. Clearly this ratio, like any statistical measure, is only a first approximation. Many children do not enter school at five, and many do not remain until seventeen. Likewise, twenty and sixty-four are only conventional age limits of the active working force. This ratio makes no allowance for the other age group for which the community has to provide—those who are past working age. Although the South has a high ratio of children to the active working population, it has a relatively low proportion of aged.

In 1950 the number of children between the ages of five and seventeen equaled 30 percent of the adults twenty to sixty-four in the population of the Northeast. In the South the ratio of children to adults of working age was 44 percent. This difference reflects in the first instance differences in the birth rates of the two regions. The difference in birth rates in turn reflects the higher percentage of Negroes and rural population in the South. For instance, the ratio of children to urban white adults in the South

is identical with the average for the Northeast—30. On the other hand, the Southern white farm population has a ratio of 56 percent. Southern Negroes who live in urban centers show a slightly higher ratio than the Southern urban whites—40 compared to 30. But the really striking ratio is the one that indicates that among the Negro farm population of the South there are nine children for every ten adults! There can be no doubt that the burden of educating children is much heavier in the South, particularly the rural South, than in the heavily industrialized Northeast. The differences are so great that, although the continuing urbanization of the South and migration out of the South are doubtlessly narrowing the gap, it will long remain. One of the major products of the South is babies. One of its major exports to other parts of the country is young adults.

What resources does the South have available to meet this heavier educational responsibility? Once again it must be noted that there are no completely reliable methods of estimating economic ability, but a reasonable approximation can be achieved through a consideration of per capita income. In 1950 the national average was $1,436; the Southeast had an average of $955. Perhaps even more revealing for our purposes is the substantial variation within the Southeast; the average for Mississippi was only $698 while for Arkansas, South Carolina, and Alabama it was around $830. At the opposite extreme was Louisiana, with $1,045, Virginia with $1,158, and Florida with $1,210. Although there was almost a $500 difference between the average per capita income in the South and in the nation as a whole in 1950, it is worth noting that during the preceding twenty years the gap between the South and the rest of the country had narrowed. The national average increased from $596 in 1930 to $1,436 in 1950, or 241 percent. In the Southeast the gain was from $279 in 1930 to $955 in 1950, or 344 percent.

A rough index of a state's ability to support the education needed can be derived by dividing the total income earned by the residents of a state by the number of school children between the ages of five and fourteen. In 1950 this index was for the total United States just under $8,500 per school-aged child. The highest figure was for New York, which had in excess of $13,600. The most affluent

of the Southern states, Texas and Florida, had about $1,000 below the national average. Virginia had about $2,000 below. All the other Southern states had an average of between $4,000 and $6,000 per school-aged child, except South Carolina which had $3,861 and Mississippi with $3,336. Despite the fact that in 1950 the average for the poorest Southern states was still less than half the national average, it is important to note that during the preceding twenty years the gap between the South and the rest of the country had narrowed. This is true of both the poorest and the richest of the Southern states. Nevertheless, such a substantial gap still existed in 1950 that it is not likely that it will be closed in the near future.

The amount of income earned by the residents of the state does not of course determine the amount of money that the state can make available to education, but it does help to set outer limits. The citizens have some degree of latitude: the extent to which they are willing to tax themselves and the choice of spending their revenue from taxes on education instead of other services. With more children to educate and less resources available, the South made a special effort to overcome at least some of its handicaps by taxing itself on behalf of education more than other regions of the country. An indication of this can be obtained by examining state and local expenditures for education per $100 income earned. In 1949–50 the country as a whole devoted $2.30 out of every $100 for the support of its primary and secondary school systems. The states in the South averaged $2.70. The Southern states which spend the smallest proportion of income on school operations—Virginia, Kentucky, Arkansas, Florida, and Georgia—were very close to the national average. Other Southern states, however, such as Louisiana, North Carolina, Oklahoma, and South Carolina made a strikingly impressive effort and spent between $3.10 and $3.70.

Once again it is interesting to note the differences in behavior between the South and the rest of the country during the preceding generation. Between 1929–30 and 1949–50 the national average expenditures for education decreased from $2.80 to $2.30 per $100 of income earned. Outside of the South every state decreased the proportion of income spent on school operation. In the South, however, there was no significant change in the average—$2.70—

and one third of the states increased their effort. One of the most interesting findings is that Delaware, a border state which practices segregation but which has a very high income, spent in 1949–50 only $1.90, while Louisiana spent almost 100 percent more, $3.70.

Despite the fact that the Federal Government made various types of contributions to local education between 1930 and 1950, mostly in the form of assistance in construction and in the support of the school lunch program, approximately 98 percent of all educational expenditures in 1950 came from state or local funds. However, during the period between 1930 and 1950 there was a very important shift in the financing of education; the burden was increasingly taken over by the states while the locality's role diminished. On a national basis state contributions to education increased from 15 percent to 43 percent of the total. This significant alteration was most pronounced in the South. In 1947–48 the nine states which have separate schools for white and Negro children provided 60 percent or more of the total educational expenditures within their borders. The increasing role of state government in the South is exemplified by the following changes which occurred during these two decades: The percentage provided by the state increased in North Carolina from one to 78 percent; in Georgia from 37 percent to 63 percent; in South Carolina, 27 to 70 percent; and in Tennessee, 24 to 60 percent. There were a series of reasons for these increases. The depressed aspect of agriculture during the 1930's made it almost impossible for many rural localities to meet even their minimal responsibilities. The increasing industrialization of the South made it easier for the states to secure a new source of revenue. Moreover, state leadership has been required to narrow the differentials between expenditures for the Negroes and the whites.

The best single measure of the quantity and quality of the education available to a community is the expenditure per pupil in daily attendance. Of course, not every teacher who earns $4,000 per annum is better than one who earns $2,500. But in our society, which encourages mobility and which places great stress upon monetary rewards, it is reasonable to deduce that gross differences in salary expenditures reflect substantial differences in service. In

1951–52 the national average expenditure per pupil was $216; the two states with the highest expenditures, New York and New Jersey, averaged respectively $325 and $312. There were four other states which spent over $275 per pupil—Oregon, Wyoming, Montana, and Delaware. Nine of the Southern states still spent less than $150 per pupil: Alabama, Arkansas, Georgia, Kentucky, North Carolina, South Carolina, Tennessee, West Virginia, and Mississippi; the average in Mississippi—only $88.

The foregoing figures are an average of the expenditures for both rural and urban schools, and include expenditures for both Negro and white schools. In 1950–51 the national average of expenditures per urban pupil was $199, while for rural pupils it was only $128. Of particular interest in the South with its segregated school system is the proportion of total expenditures spent for white and for Negro pupils. In 1947–48 the total expenditures per pupil for the United States averaged $179. The accompanying table suggests the extent to which various Southern states made an effort during that year to provide approximately the same quality of education for whites and Negroes as opposed to concentrating on giving the white population as good an education as possible.

AVERAGE EXPENDITURE PER PUPIL, SELECTED SOUTHERN STATES, 1947–48

STATE	ALL	WHITE	NEGRO
Florida	$161	$177	$113
Oklahoma	145	143	168
South Carolina	112	146	68
North Carolina	109	114	96
Alabama	106	123	75
Georgia	104	127	59
Arkansas	93	103	60
Mississippi	71	115	24

The high expenditures for Negroes in the state of Oklahoma reflect the fact that with only 35,000 Negro pupils in the state a segregated system of schooling is expensive. Aside from this, only North Carolina had almost eliminated the gap between expenditures for the whites and the Negroes. The most striking record was that of Mississippi, where the differential between expenditures was almost five to one in favor of the whites. As one expert com-

mented: Mississippi is educating the whites off the backs of the Negroes.

Despite the significant difference between the average expenditures in the South and the rest of the country, and despite the persistence in most states of much larger expenditures for white than for Negro pupils, the past decade has witnessed a real effort in the South to increase its expenditures for both white and Negro pupils, with particular stress on the latter. For instance, between 1941 and 1951 Alabama increased its expenditures per pupil enrolled about 170 percent for whites and 530 percent for Negroes. At the present time the state itself spends the same amount for Negroes as for whites; such differences as remain reflect local funds which account for only 20 percent of the total. Between 1930–50 Florida increased the total amount spent on white pupils from $62 to $186 and from $17 to $131 for Negroes. During this same period Louisiana increased its expenditures per pupil from $46 to $142 for whites and from $12 to $87 for Negroes. In South Carolina expenditures for white pupils increased from $58 to $113, and for Negroes from $8 to $54. Between 1940 and 1951 Arkansas increased its expenditures for Negro pupils from $14 to $78 per annum.

The magnitude of this Southern effort can be gauged by comparing it with expenditures in the country as a whole; actually a little less per pupil was spent in 1939–40 than in 1929–30, and during the past decade expenditures have increased by less than 100 percent. Both in absolute and percentage terms, the South did much for its white population, and particularly for its Negroes. Yet once again the fact remains that the discrepancies between the South and the North, and between the white and the Negro in the South, were so great before this accelerated effort started that, with few exceptions, sizable differentials still remain.

All of the foregoing figures relate to expenditures. The quality of an educational effort also depends, however, on the type of facilities available. It may be that Americans have always placed stress on facilities to the disregard of the instructional staff, but there can be no doubt that communities which have poor school buildings have a much harder time in attracting and holding good teachers, and the teachers in turn have a much harder time in

stimulating and encouraging the student body to put forth its best efforts.

The value of educational buildings and equipment follows the same general pattern as was found to exist in the case of expenditures. In 1947–48 the average value of property, buildings, and equipment per pupil in average daily attendance amounted to $441. This was the national average. Some indication of the wide range is given by comparing the average for New York State, which was $841, and for the three Middle Atlantic states, which was $702 with the South with a low of $158 for Kentucky, Tennessee, Alabama, and Mississippi. The West South Central region (Arkansas, Texas, Oklahoma, and Louisiana) averaged $299. Detailed data are available for ten Southern and border states which distinguish between all pupils and Negro pupils. In Alabama the state property and equipment average for all pupils amounted to $121, for Negro pupils it was only $35. In North Carolina the comparable figures were $221 for all pupils, $106 for Negro pupils. In none of the Southern states was the value of property and equipment for Negroes equal to even half of the average for Negro and white pupils combined. The accompanying table summarizes the comparisons.

AVERAGE VALUE OF PROPERTY, BUILDINGS, AND EQUIPMENT PER PUPIL AND PER NEGRO PUPIL, TEN SOUTHERN AND BORDER STATES, 1947–48

STATES	ALL PUPILS	NEGRO
Alabama	$121	$35
Mississippi	148	51
South Carolina	191	66
Georgia	196	72
Florida	277	75
Louisiana	285	81
Arkansas	202	81
North Carolina	221	106
Texas	356	139
Maryland	398	203

In addition to the sizable differences between the value of school property per Negro pupil and per white pupil in the Southern states, another difference found to exist throughout the country

is worthy of note. In 1950–51 the cost value of school buildings per pupil was over $500 in urban areas and under $250 in rural areas. In part this very low value of the Negro school-buildings per pupil reflects the continuing high number of one-room schools in the Southern states which have a large Negro population. Although between the end of the 1920's and the end of the 1940's there was a decline from 250,000 to 75,000 one-room schools in the country, most of those still in existence in the South in 1947–48 were for Negroes. In the eight states with the highest proportion of Negroes in the population, 7,000 out of 8,500 one-room schools were for Negro children.

Although it is difficult to secure reliable current figures about the trends in capital outlay for education, there is information available which indicates that these expenditures have been quite substantial in the South during the post-war years, and that the Negro population has received a rather large share of the total expended. This is probably the consequence of the increasing recognition in the South that the Negro has been badly discriminated against in the past and that if segregation is to be maintained, a strenuous effort must be made to begin to equalize expenditures.

In the two-year period 1947–49 Louisiana increased the value of Negro schools from $81 to $118 per pupil. During the decade 1940–50 Arkansas increased the total value of its Negro school property from $3.7 million to $12.4 million. In 1951 both North Carolina and Mississippi spent more on construction for Negro schools than for white schools: in North Carolina $9 million were made available for school construction for white pupils and $10.5 million for Negro schools; in Mississippi $5 million were spent on white schools and $8 million on Negro schools.

Certainly if the present trends continue, the tremendous gaps which previously existed between the white and the Negro school properties in the South will narrow. However, considering the large number of Negro schools in the South that are particularly poor, it would take a very long time and very large expenditures to close the gap. Many Negro schools, particularly in the rural areas of the South, are very old, very dilapidated, and very unsanitary. The problem is further complicated by the fact that the areas most in need of modern schooling are frequently those with the

smallest local tax base. Furthermore, if the poor white and the Negro population in these poor regions had the advantage of better schooling, they would be likely to move to places which offer better prospects of a decent livelihood. They might, of course, be in a position to live more effectively and produce a higher volume of goods and services in their local area. But the threat of out-migration, more frequently the desirability of it, makes those responsible for the allocation of limited funds disinclined to invest them where they are most needed today but may be much less needed tomorrow.

In addition to the expenditures for current operations and for capital purposes other important indices of the quantity and quality of educational services are the size of the enrollment, the length of the school term, and the average daily attendance. One of the interesting developments over the past several decades has been the substantial narrowing of the gap between the South and the other regions of the country with respect to enrollment. In 1950, 84 percent of all the children living in the Northeast who were between five and seventeen years old were enrolled in school. In the South the percentage varied from a low of 78 for the white and the Negro children on farms to a high of 82 percent for urban white children.

By the end of the 1940's the large differential in the length of the school term which had previously existed between North and South had been likewise almost eliminated. In 1948–49 the national average was a school term of 178 days. The average in the South was 176 days, with a range of 172 to 180 if the exceptional case of Mississippi which averaged only 154 days is excluded. During the preceding two decades there had been an increase of seventeen days in the average for the South as a whole, while there had been a slight decline for the rest of the country. A striking gain was recorded by the Negro schools, for which the school term was increased by an average of forty days. A final index, the average daily attendance as a percentage of enrollment, likewise shows little difference between North and South, white and Negro at the end of the 1940's. The national average was 87 percent. There was no difference between the South Atlantic states and the Middle

Atlantic states. The average attendance of Negroes in the South was 83 percent.

This uniformity in the averages relating to the length of the school term and daily attendance is, however, somewhat misleading, for when the figures are inspected in greater detail substantial state and racial differences are revealed, particularly when the two indices are used in combination. In 1947–48 the average number of days attended per pupil amounted to 160 in New England. In the seventeen states and the District of Columbia which practice segregation, the averages were 153 days for white pupils and 143 for Negroes. In six Southern states the average Negro attendance totaled 140 days or less—a full month below the New England average. The average for Mississippi was 118 days; South Carolina, 132; Arkansas, 137; Georgia and Texas, 139; and Louisiana, 140. In assessing these figures it is important to recognize that in most instances school funds are allocated on the basis of daily average attendance reports, and there is therefore a tendency on the part of many local officials to exaggerate the numbers present. In many parts of the South the enforcement of school attendance, particularly in the case of Negroes, is very lax. There is reason to suspect, therefore, that the statistics understate the true differences between the South and the other parts of the country, particularly where Negroes are concerned.

The major differences in current expenditures between the South and the other parts of the country are reflected in the salaries paid to elementary and secondary school teachers and principals. In 1950–51 the national average salary for teachers was just under $3,000. In the North and West more than half of the states paid their teachers an average of above $3,000, and no state paid an average of less than $2,000. In the South, however, only the two border states of Maryland and Delaware, and Texas paid their teachers an average of over $3,000, and four states paid an average of under $2,000. The average for Mississippi was only $1,400.

Despite this very substantial differential between the South and the other parts of the country, much has happened during the last decade to equalize the salaries of the white and the Negro teachers within the South. In many states equal salary schedules are now

in effect or about to go into effect. Perhaps the most striking development was the increase of about 400 percent in the salaries of Negro teachers between 1941 and 1951 in eight Southern states. During this time increases for white teachers were much smaller. The following table summarizes the relevant figures:

SALARIES PAID TO TEACHERS, ELEMENTARY AND SECONDARY SCHOOLS, IN EIGHT SOUTHERN STATES, 1941 AND 1951, BY RACE

	White		*Negro*	
STATE	1941	1951	1941	1951
Florida	$1,158	$3,064	$597	$2,743
Georgia	1,011	2,229	461	1,795
Virginia (male)	1,272	2,804	726	2,629
North Carolina	1,006	2,785	837	2,785
Alabama	846	2,208	408	1,966
Arkansas			375	1,449
Louisiana	1,169	2,562	444	2,562
Mississippi	735	1,865	233	918
Average	$1,030	$2,500	$510	$2,105

As one might suspect there is a substantial difference between the salaries of teachers in urban and rural areas. In 1950 the national average for most teachers was $2,200, the urban average, $3,300. As far as formal qualifications are concerned, the South has approximately the same standards as the rest of the nation, although these standards are somewhat below those prevailing in the Northeast. Six of the sixteen Southern states require a college degree for all teachers. In the Northeast this is true of all of the states except Maine and Vermont. The nation-wide shortage of elementary school teachers has resulted in the issuance of emergency certificates to individuals who fail to meet state requirements. The percentage of teachers with emergency certificates in the South is approximately the same as in the other areas and the bulk of them are in the rural sections; 13 percent of the rural teachers do not hold regular teaching certificates, while this is true of only 3 percent of the urban teachers.

During the past decade there have been striking increases in the level of preparation of Negro teachers, a trend which was paralleled by the substantial increases which these teachers re-

ceived in salary. For instance, in 1941 only one out of every three Negro teachers in Florida had a Bachelor's degree; today nine out of ten have one. In Virginia the ratio has increased from about one out of three to three out of four. Over two decades the increase in Louisiana was from two out of five to nine out of ten. In several Southern states, including Virginia and North Carolina, the percentage of Negro teachers with Bachelor's degrees was greater than among white teachers. It is interesting to note that in 1950, 20 percent of all the rural teachers in the United States had attended college for less than two years, and 6 percent had never entered college. About 1,000 rural teachers had not even graduated from high school.

An important factor in determining the quality of education which a pupil receives is the number of pupils for which each teacher is responsible. Recent composite data presented a favorable picture; in the South there are twenty-nine white pupils per teacher and thirty-four Negro pupils per teacher. There are, of course, much larger classes. In North Carolina, for instance, one-fourth of all the teachers have classes of between forty and fifty pupils; and 5 percent of the teachers have classes of between fifty and sixty pupils. Some rural teachers have classes of as many as ninety pupils.

A further factor affecting the quantity and quality of schooling is the ease of transportation. According to the most recent figures available, the South transports about two out of every five children in school at public expense as compared to the national average of about one out of five. However, an inspection of the figures in greater detail reveals a striking difference between the percentage of the white and the Negro children who are transported at public expense. In the case of twelve Southern and border states, approximately one out of every two white pupils is so transported, while for Negro pupils the ratio is less than one out of five. This discrepancy can be amply illustrated by a few extreme cases: Alabama transported 61 percent of its white pupils and 17 percent of its Negro pupils; Georgia, 52 percent of its white pupils, 8 percent of its Negroes; Louisiana, 62 percent white, 12 percent Negro; Mississippi, 71 percent white, 7 percent Negro.

Negro children may have an equal opportunity to attend school,

but a much larger percentage of them go to inferior and overcrowded one-room schools, rather than to better-constructed and better-staffed consolidated schools. Similar to this actual discrimination is the distribution of public funds for school lunch programs. In 1947–48, the total expenditure for school lunches amounted to $3.14 per pupil in average daily attendance for the United States as a whole, and the average for the South was $3.45. In the seven Southern states for which detailed data are available, an average of $4.31 was spent on this program for each white pupil and $1.00 for each Negro pupil. In Georgia, the expenditures were $5.37 for a white pupil and 68 cents for a Negro pupil. The most extreme situation was again found in Mississippi, which spent $6.94 for each white pupil and one cent per Negro pupil.

The examination of these trends in Southern education was undertaken for the specific purpose of determining whether the very large number of uneducated individuals who were born and raised in the South was likely to diminish in the forthcoming decade because of trends already under way, or whether such large numbers would be likely to persist in the absence of a specific national policy aimed at eradicating illiteracy. This book is concerned, not with a critical estimate of the total gap between the educational systems of the South and of the rest of the country, but with the limited question of whether the white and the Negro children born in the South during the 1940's and 1950's, including the more impoverished rural areas, now have an opportunity to acquire a basic minimum education. Unfortunately, it is exceedingly difficult to find clear-cut evidence which would permit a definitive conclusion. Certainly the level of Southern education which was steadily improving in the period between 1890 and 1930 has continued to improve between 1930 and 1950, probably at an accelerated pace. Even more important from our viewpoint has been the increased effort which almost all of the Southern states have made to close the gap between their rural and urban schools, and particularly between their Negro and white schools. It would surely appear that the sum total of these efforts will reduce very considerably the number of individuals in the South who do not attend school at all or who fail to acquire basic literacy skills as measured in terms of the completion of four years of schooling.

However, there are many disturbing facts and figures which

suggest that a considerable number of young people who attended schools during the 1940's or who will attend school during the 1950's will not acquire even this minimum education. For the nation as a whole only seven out of every ten children who were enrolled in the first grade in 1943–44 had reached the fifth grade four years later. Of the Negro students in the seventeen states and the District of Columbia which segregate their schools, only four out of every ten had reached the fifth grade. Although these and related figures on grade enrollment may reflect retardation rather than drop-outs, very high rates of retardation in the early grades foreshadow the fact that many pupils will probably leave school before they complete four grades. For instance, the Florida State Department of Education estimates that at present 20 percent of the white pupils and 30 percent of the Negro pupils who begin school fail to complete four grades, and these percentages are, of course, exclusive of the unknown number who never enter. The South Carolina Department of Education estimates that since 1937 when compulsory attendance was first put into effect, 30 percent of the white children and 62 percent of the Negroes entering school have failed to complete four grades. In 1950 one out of every three children between the ages of ten and thirteen in the Northeast had failed to complete five years of school; in the same age group, the ratio for Southern Negroes was 60 percent. In 1947 a special study revealed that one out of every six male Negro children between the ages of fourteen and seventeen had not completed five grades, and it was reasonable to conclude that they never would.

Despite the striking improvements which have taken place and are continuing to take place in Southern education—improvements reflected in the raising and equalization of teachers' salaries; large-scale expenditures for new buildings, including priorities for Negro schools which have been most neglected; high enrollment rates; high attendance rates; a lengthened school term—the fact must be faced that a considerable, if unknown, number of children, particularly in the rural South, and more particularly among the Negroes, will fail to complete four grades of schooling and acquire basic literacy skills in school. This is the burden of the evidence. The alternatives facing the country will be analyzed in the last chapter.

CHAPTER 12

THE ARMED SERVICES

IN PART II we reviewed the substantial experience of the Armed Services, particularly the Army, in inducting and training the uneducated and poorly educated during World War II. We saw that the extreme exigencies of war gave those in command little opportunity to design and carry through evaluative studies of the military performance of the uneducated. And since the end of hostilities the Armed Services have not carried through any comprehensive study which would provide a sound basis for current and future policy. Each of the three Services, Army, Navy, and Air Force, have been sponsoring a considerable amount of research devoted to analyzing various aspects of manpower under conditions of military service. Many of these projects have dealt with such problems as the development and validation of various testing devices which are closely related to the selection and utilization of the poorly educated within the military. However, even at the outset of the Korean war, the Armed Services knew little more than during World War II about setting mental standards for induction or about whether it was worthwhile to provide special instruction after induction for those who did not possess basic literacy.

In the immediate post-war period the Navy and the Air Force had managed to secure their required number of men for peacetime operations though their mental standards for enlistment were considerably above those of the Army. Even though they, too, had to expand much more rapidly, they found it practical to maintain

their higher standards because a sufficient number of young men liable to induction under Selective Service preferred to enlist in either the Navy or the Air Force. Hence, in the months following the outbreak of hostilities in Korea, the Armed Services pursued a series of policies which resulted in the rejection of a very large number of otherwise eligible young men on the grounds that they did not have the "mental" prerequisites for effective service.

Before analyzing the statistical data which will help to quantify the problem, it is well to make explicit certain important facts that help to explain the basic attitude of the Armed Services toward the induction of the poorly educated. Since they had failed to undertake a comprehensive evaluation of their World War II experience, it was necessary for the Armed Services to guide their current policies in terms of their best estimate of that experience. With few exceptions, both the senior commanders and their technical staffs were convinced that the poorly educated man had proved himself to be an expensive soldier and that the Services should avoid accepting any considerable number of them as long as possible, since the investment of further training them would result at best in undistinguished performance.

This attitude held by the Army officers was reinforced by a significant post-war experience. In 1946 and 1947 the Army found itself with more than its authorized strength and had to separate men who would have liked to remain in the service. In culling its ranks, the Army sought to discharge those soldiers whose performance had been inferior because of excessive breaches of discipline, frequent periods of incapacity due to venereal disease infections or other diseases, or a simple inability to perform their specified duties effectively. It was found that a considerable percentage of these less desirable soldiers had a very limited educational background and had scored poorly on the mental tests. Thus, the negative attitude of the military toward the poorly educated based on impressions of World War II conditions was reinforced by this later experience.

During World War II the Armed Services operated under the following clause in the Selective Training and Service Act of 1940:

> . . . No man shall be inducted for training and service under this act unless and until he is acceptable to the land or naval forces for

such training and service and his physical and mental fitness for such training and service has been satisfactorily determined. . . .

This meant that control over standards for enlistment and induction rested with the Services, not with the Selective Service System nor with the Congress. Of course, the change in policy with respect to illiterates was largely a result of public and Congressional criticism during 1941–42 when the Services were not accepting the poorly educated. The Selective Service Act of 1948 again provided that the standards would be set by the Armed Services, specifically by the Secretary of Defense. However, the Act went on to state that "The passing requirement for the General Classification Test shall be fixed at 70 points." Clearly the Congress felt that the Armed Services might again be too selective and set too high a standard with respect to mental capacity, and therefore specified a minimum passing score for inductees. The Armed Services were still to set the score for volunteers.

One other consideration affected the recent policies of the Armed Services governing the acceptance of men with limited educational background and mental capacity. The Armed Services, particularly the Army, had to expand very rapidly without knowing whether the limited hostilities in Korea were the prelude to a major war which would necessitate a full mobilization. If this were a buildup prior to full mobilization, it would be desirable for the Armed Services to secure that type of man who could not only be rapidly converted into a soldier or airman—the Navy was under less pressure of time—but would also possess the capacities to become a cadreman. Clearly this was an important consideration, and one that seemed further to justify high selection standards.

How selective the policies have been, particularly with regard to mental standards, has been suggested by the periodic reports in the press about the excessively large number of young men who have been rejected for military service since Korea because of an inability to pass the mental test. Many of the reports have been based upon incomplete statistics and few have been critically evaluated. During the eighteen months from July, 1950, through December, 1951, just over 2 million Selective Service registrants were examined for induction. Of this number about 1.3 million were accepted and slightly more than 700,000 rejected. More than half

of all those rejected, 54 percent, had failed to pass the new mental examination called the Armed Forces Qualification Test (AFQT). Some of those who failed were disqualified not only for this reason but because they had not met the physical or emotional standards. Just under one out of every five registrants examined failed the AFQT.

As in World War II the largest number of men rejected for mental and educational reasons came from the Southeast. Of the 392,000 who failed the examination during this eighteen-month period, 213,000, or 54 percent, were resident in that area. The following table shows the regional distribution:

New England	8,900
Middle Atlantic	63,500
Southeast	213,000
Southwest	27,800
Central	58,700
Northwest	6,700
Far West	13,300

In the absence of figures which differentiate between Negroes and whites and indicate the members of the manpower pool who saw service in or after World War II, it would be venturesome to undertake a definitive comparison between the experience since Korea and during World War II. However, a few tentative generalizations may be justified. The present rate of rejections for mental causes is considerably above the 4 percent figure which prevailed during World War II. It is hard to draw an accurate comparison since the individuals who have been rejected during the past eighteen months were drawn from six or seven age classes. Using as a base the total intake into the Armed Services of approximately 3.3 million during this period, the AFQT failures would amount to 12 percent. However, after allowance has been made for men with previous service the rate would probably approximate 8 percent.

There are a few regional comparisons that can be made between World War II and the current partial mobilization. During World War II the Southeast accounted for 435,000 of the 716,000 total who were rejected because of mental or educational handicaps, or 61 percent. Today this region accounts for 54 percent. In World

War II the Southwest had a total of 89,000 rejections, or approximately 11 percent of the total. Today, with 28,000 rejections, this rate is about 7 percent of the total. The improvement shown by the Southeast and the Southwest has been paralleled by a worsening in the position of the other regions of the country, particularly the Middle Atlantic, the Far West, and the Central Regions in that order. The explanations for these changes among regions are to be found in the substantial migration out of the Southeast of the poorly educated which has taken place particularly since 1940; and, secondly, in that the current examination presupposes a knowledge of English which was not true of the examinations in use during the second part of World War II. Of course, the present rejection rate which is considerably above that prevailing during World War II for the country as a whole must reflect a change in the testing standards. The amount and quality of education available to young men today, particularly in the more handicapped regions of the country, is considerably above that available to the men who were screened during World War II.

There have been repeated complaints that the AFQT is a very unsatisfactory device for assessing the mental qualifications of an individual for military service. This point of view is trenchantly expressed in the following quotation from an expert who made a special study of men who were being rejected for military service in the State of North Carolina:

> In my opinion, the test the Army is using is not a mental test at all. It is an achievement test because the whole test is based on the ability to read. This test does not measure the mental ability of an individual unless he can read.

The present examination which is made up of three parts—arithmetic, language, and spatial relations—certainly cannot be handled successfully without a reasonably good reading knowledge of English. It should be noted again that during the latter part of World War II the examinations used to estimate the mental qualifications of Selective Service registrants were constructed to reveal the individual's ability independent of his knowledge of English.

What kind of men are now rejected? Early in 1951 we had an opportunity to interview thirty men who had failed the mental

examination at two induction stations in one of the Southeastern states. Under the then prevailing Army regulations, six of the thirty would be accepted for service regardless of this failure because they had successfully completed nine grades of school. According to the regulations this was prima facie evidence that they had acquired the minimum literacy essential for successful military performance. It is noteworthy that on inspection these thirty men were indistinguishable from those who passed. With few exceptions, they were neatly attired and created a good general impression. They were all twenty or twenty-one years old. Most of them had come from rural backgrounds, and many were then employed on farms operated by their parents or other relatives. Several were working on rather large farms which had 150 to 300 acres under cultivation. Since some of these were family operations, it was difficult to obtain a statement of the earnings of the rejectees. However, few who worked for wages were earning less than $35 a week.

Although farmers accounted for the largest part of the group, many other occupations were represented: electrician's helper, sawmill worker, truck driver, railroad employee, rock miner, fishing and hunting guides, semi-skilled machinist. These men were averaging above $40 a week. A special effort was made to determine whether these men were the marginal members of the labor force who floated from one job to another, or whether they were steady workers. Their records were clear. With two exceptions, they were steady workers.

There is no mystery about why these men failed the AFQT. A study of their examination papers revealed that they had been able to read only haltingly, and they therefore completed but a small number of questions. They had all attended school for a number of years, varying from three to eight, but it had been a long time since they had read a book or taken an examination. They repeatedly stated that they were "not much at reading books," but they thought that they knew more and could do more than they had demonstrated on the test. There is no doubt that they were right, for this was the only possible conclusion after a study of their civilian work records.

At about the same time, in the spring of 1951, an analysis was made of the records of 439 men in one of the large cities in the

Middle Atlantic states who had been rejected because they had failed the AFQT. This analysis revealed that 67 percent of the rejectees were foreign-born, 27 percent were Negroes, and only 6 percent were native-born whites. The three predominant groups among the foreign-born were Italians, Puerto Ricans, and Poles. Their educational achievements ranged from no schooling whatever to several years of high school. The foreign-born and the Negroes had attended school for an average of only 3.5 years. Considering the very small number of native-born whites who were rejected and their very limited schooling, it is likely that these represented a group of mentally deficient or at best borderline persons. This was not true of the foreign-born and the Negroes, as evidenced by their employment records and earnings.

The 288 foreign-born included a considerable number of skilled and semi-skilled workers. Among them were tailors, carpenters, cabinet-makers, bricklayers, bakers, barbers. However, the largest number were employed as semi-skilled workers in manufacturing plants or as general laborers in the service industries, particularly in the food trades. Their earnings averaged slightly under $40 a week, with a range from none at all to more than $100 for the exceptional man. The 114 Negroes were heavily concentrated in general laboring jobs, or in laboring jobs in manufacturing industries. Their weekly earnings and the range of their earnings closely paralleled the record of foreign-born. Most of the 28 native-born whites were also employed as general laborers, although a small number of them had jobs in industry. None of them earned above $60 a week, while their average of $35 weekly was somewhat below that of the Negroes and the foreign-born. One of the most important findings about the group as a whole was the fact that nine out of every ten men had a physical profile A, which implied superior physical qualifications.

Why have the Armed Services been so adamant about refusing to accept for military service young men who were in excellent physical condition and who, despite certain deficiencies in their formal schooling, were making a satisfactory adjustment to the social and economic demands of life? In searching for the answer it is important to repeat that the Armed Services had never evaluated their experiences with the illiterate and poorly educated

during World War II, and therefore continued to judge them in terms of impressions and prejudices. The underlying assumption behind the policies of World War II and still present today is that the poorly educated man is a difficult and expensive recruit who at best will turn in an unsatisfactory performance in the military service.

A summary of the representative military approach to the illiterate and the uneducated is presented in the remarks of the Director of Training of the Department of the Navy, in commenting on the Navy's special classes for illiterates during World War II:

1. It took approximately four times as long to train an illiterate to perform an average Navy job as it did to train one who could read.
2. A training program which did not depend on the use of printed matter would have been both difficult and expensive. Experience showed that it was simpler and more economical to teach men to read than to devise other training materials.
3. The establishment of a smooth administrative routine was greatly complicated by the presence of non-readers. A system for the rapid handling of records was a virtual impossibility where men could not fill out information blanks, pay receipts, beneficiary forms, etc.
4. Sufficient education to read safety precautions was essential for men working with machinery, high explosives, and heavy cargoes. Serious accidents were traced directly to the inability of men to read warnings and study safety instructions.
5. A serious social barrier was found to exist between literate and illiterate personnel.
6. The administrative dualism entailed by grouping literates and illiterates together caused much confusion. Literates tended to resent the long oral directions which were given for the sake of the illiterates in their number.
7. A large number of minor disciplinary problems were direct outgrowths of misunderstandings caused by the inability to read station orders, watch bills, leave and liberty regulations, and safety precautions.
8. The inability to read and write letters constituted a serious morale problem and a consequent obstacle to satisfactory adjustments to Naval life.

This summary points up the handicaps which would face the

Armed Forces if they were forced to accept and utilize a number of illiterates and slow learners. However, as we have seen, the Armed Services resolved this problem during World War II by instituting special training units which enabled the illiterates to acquire at least a basic literacy after a few months of special instruction. Why, therefore, are the Armed Services at the present time reluctant to undertake again this type of special training? The answer to this question again lies in the fact that prevailing military doctrine does not include an objective evaluation of the training of these handicapped persons during World War II. As long as the Armed Services regard these efforts as a failure or, at best, as a very limited success, they will be reluctant to repeat the undertaking.

But there is more to the story. One of the senior officers of the U.S. Army has defined the primary aims of the peacetime Army as follows:

a. To establish an organization able to meet any military emergency in the most successful manner, and
b. To provide a Cadre of non-commissioned and commissioned officers for the training of personnel inducted or enlisted from civilian life

Among the other important points stressed by the senior Army staff about the peacetime Army are the following:

a. During peace there is usually a low ceiling on the strength of the Army and it is militarily advisable to have the highest possible calibre personnel in the peacetime Army.

b. Education is not a primary function of the Armed Forces. Armies in democratically organized nations with an industrial economy must utilize in an emergency, personnel with a general educational level which civilian educational systems have produced.

c. The most important scientific fact available about mentally marginal individuals is that they function more adequately if the demands made upon them are consistent with their capabilities. . . . Optimal utilization of national manpower will be obtained by keeping the relatively untrainable in the "limited assignments" they already have in the civilian industrial economy.

d. Personnel selection, training, and management techniques can be evaluated scientifically only if and when criteria of individual or

unit success can be had. They are generally unavailable or inadequate. Until this technical deficiency is modified, there will be little satisfactory objective data regarding proper utilization of marginal or any other manpower.

e. It is expected that during full mobilization mental standards will be lowered to that point which was used during World War II; that is, all individuals considered to be trainable will be subject to military duty.

The position of the Army in a period of partial mobilization like the present seems to be eminently reasonable. With sufficient men in the manpower pool to permit it to meet its requirements from physically and mentally qualified persons, it sees no point in assuming the burden of inducting individuals who would have to undergo special training to enable them to meet an acceptable educational standard. If the Army were to institute special training, it would have to increase its instructor personnel; its operating costs would be increased by the outlay for special facilities; and its operating efficiency would be somewhat impaired because of the extended period of training for the poorly educated and the consequent reduction in the period of their effective duty.

Additional difficulties would follow the induction of a substantial number of poorly educated persons. Few of the men would acquire more than a minimum literacy and would therefore be unable to serve as cadremen for an expanding Army. Moreover, many of these men, even with the advantages of special training, would probably not be able to make as good an adjustment to the Army as they had been able to make in civilian life, with the result that their induction would mean a reduction in the efficient utilization of national manpower resources, rather than an increase in manpower effectiveness. Although it has not previously been made explicit, the Army is also concerned with the limited value that these educationally marginal people will have as members of the reserve, which, after all, is a major facet of manpower planning in a period of partial mobilization. Since our scientific knowledge about all types of manpower, including these marginal groups, is at present inadequate for the development of sound policies, the prevailing military approach is to keep the illiterate and the uneducated out of the Army and to plan on utilizing them if the

country is confronted with a major emergency which will lead to full mobilization.

The discussion up to this point has been primarily in terms of the Army rather than the Armed Services, for the simple reason that until the Secretary of Defense issued his directive on "Qualitative Distribution of Military Manpower" in April, 1951, the problem of the illiterate and the poorly educated was of concern only to the Army. With the Selective Service System in force there were a sufficient number of young men subject to the draft who preferred to enlist in the Air Force, Navy, or Marine Corps, rather than be inducted into the Army. In fact the numbers who sought thus to avoid service in the Army were sufficiently great to enable the other Services to keep their standards considerably above that which had been stipulated by Congress for inductees.

Prior to the institution of "Qualitative Distribution" the Army was threatened by an inundation of a disproportionate number of individuals with minimum AFQT scores. Moreover, there was also a steady build-up of Negro strength within the Army out of all proportion to that in the other Services. This resulted from the fact that so high a proportion of the Negro population came from the rural parts of the Southeast where educational opportunities were below those in any other part of the country. The continued reluctance of the Army to reinstitute special training units for the illiterate and the uneducated after the outbreak of the Korean war reflected its belief that having such units would be worse than the position into which it was being forced by the "escape" of the better educated into the other Services.

The new plan for Qualitative Distribution sought to adjust these imbalances among the military departments by establishing identical minimum physical standards for acceptance for all Services, and by providing that each Service receive equal shares of men of different mental qualifications irrespective of whether they enlisted or were inducted. Without going into great detail, there are several trends in manpower allocation among the Services resulting from the institution of this new plan. The Air Force and the Navy did increase the number of men with lower educational qualifications that they accepted, and for the first time the Army secured its proportionate share of men with higher educational

qualifications. So far the system was successful. However, it has not really begun to affect the educational marginal men, for the Armed Services are not now accepting any illiterates or even those better educated men who still fail to achieve a minimum score on the Armed Forces Qualification Test. As far as the distribution of Negro manpower is concerned, the percentage in the Air Force has increased substantially since the institution of the Qualitative Distribution plan, but in the Navy it is still very low.

We have seen that the Army was justified in insisting on preventing the inflow of large numbers of illiterates or poorly educated men prior to the establishment of the Qualitative Distribution system in April, 1951. The next question is whether there is any basis in logic or in fact for the continuing negativism of the Armed Services toward the acceptance of this type of personnel. In passing it should be noted that the Congress, disturbed by this resistance of the Armed Services wrote into legislation a downward revision of the passing score on the Armed Forces Qualification Test, so that as a matter of fact certain men who would previously have been rejected must now be accepted for service. But, despite this revision, literate men who do not command a knowledge of English, poorly educated persons who have forgotten how to read, write, and reckon and, finally, those who never had this knowledge, are currently being rejected for military service.

The approach of the Armed Services to these educational marginal persons is predicated on the following five assumptions:

1. There are relatively few men among the group which is currently being rejected on educational grounds who could become acceptable soldiers.
2. The costs involved in special training and in other adjustments that would be required would far outweigh the contribution of these men.
3. It is expedient for the Armed Services to select at the present time those men who have the fewest handicaps and to wait until full mobilization makes it necessary to accept marginal personnel before doing so.
4. The current screening device, the Armed Forces Qualifications Test, is accurate in that it does indicate whether men

will be able to absorb the various types of instruction and training.

5. During the present period of partial mobilization, it is desirable to pursue research to determine the minimum degree of intelligence which will enable an individual to absorb sufficient military training to be of benefit to the Armed Forces. However, no policy change should be made until valid results are obtained from the research.

It is important to discuss each of these assumptions in turn, for only in this manner will it be possible to reach a balanced judgment about present approaches to the selection of military manpower with particular reference to the group of the uneducated.

The first claim states that there are relatively few potential soldiers among the current numbers who are being rejected for educational reasons. During World War II approximately 4 percent of all men of ages eighteen to thirty-seven examined were rejected because of an inability to pass the mental tests, whereas it appears that the present rejection rate is about 8 percent. Some allowance has to be made for the fact that we are currently screening a population in the lower age groups. Since the educational opportunities for the American population have been increasing through time, it follows that the younger age groups should be in a better position to pass a mental test than the age group which was examined during World War II, which included men up to thirty-seven years of age, in contrast to a current maximum of twenty-six. The 4 percent rejection rate for mental reasons during World War II has tended to become accepted as a reasonable cut-off point for an examination aimed at determining which younger men have the mental abilities to serve effectively as soldiers. This figure, has, however, no special validity and is, in any case, lower than present rejections.

There is a body of informed opinion which suggests that about 2 percent of the population would find it impossible to meet the ordinary social and economic demands of life unless their environment were protective. They simply do not possess sufficient mental acumen to be able to meet the stresses and strains of an individualistic and competitive world which expects the individual to care for

himself and at the same time requires him to meet the standards of the group in which he finds himself. There is no sound basis for choosing between the preferred military figure of a 4 percent rejection rate and a civilian presumption in favor of a 2 percent rate. There are, however, certain supplemental pieces of evidence that can help to illuminate this problem. When we consider the results of our investigation into the performance records of the men who were assigned to special training units, there is every reason to conclude that there were many more men in the population from which this group was chosen, who, if they had been afforded an opportunity, would also have been able to make the grade. Then we found that white men in the Southeastern states were rejected for mental deficiency at a rate of 5 percent, in contrast to a one percent rate for the Middle Atlantic states. It might well be that the 5 percent rate reflected certain deficiences in the screening instruments, rather than in the population.

There are a sufficient number of pitfalls in the use of national statistics to warn against placing reliance upon international comparisons. However, a few comments about the experience of foreign armies may be revealing. Although the British have not had the same problem of a large number of young men who are totally or largely illiterate, they did meet, both in World War II and since the reinstitution of National Service, the problem of the "dullard," the person whose mental equipment is so limited as to make it difficult for him to meet the multiple demands of military life. Even if the comparison between the United States and the United Kingdom is limited to white registrants, the rejection rate for mental reasons in the United States, both in World War II and again in the more recent experience, is approximately three times that of the British.

Under the Nazis the Germans set a very low mental standard for acceptance; it was the equivalent of an Intelligent Quotient of approximately 55. Since Germany was practically free of illiterates, those who scored very low on the examination were clearly feeble-minded. However, the Army apparently found a way to use them in messes, as ammunition carriers, and as general laborers. The history of this period shows that a certain number of these mentally deficient persons apparently improved while in

military service so that they were no longer subject to sterilization, which was the likely fate of the true mental deficient in Germany.

In France mental deficiency, defined in terms of idiocy or imbecility, is a basis for rejection for military service. In Switzerland in 1950 there was only one illiterate soldier. The Swiss follow a system whereby prospective recruits who do badly on the educational examination prior to call-up must take about eighty hours of special instruction so that they can meet a minimum standard. Wherever illiteracy was prominent, as in Italy, Poland, Russia, and other eastern European countries, a recruit's lack of ability to read and write was never sufficient basis for rejecting him for service. By and large, European armies followed a selection principle, both during conscription and in war, which sought to limit rejections for mental reasons to the clearly non-usable group of idiots and imbeciles.

A review of the available statistical data in the United States bearing on rejections and selections for military service, as well as the burden of the European evidence, does not appear to substantiate the first basic assumption of the Armed Services, that there are relatively few now being rejected on mental grounds who could be turned into acceptable soldiers.

What of the next assumption, that the costs of special training would far outweigh the contribution of these men? This conviction grows out of the admittedly unscientific generalizations based upon the military experience with the illiterate and the uneducated in World War II. Both the line and staff had concluded that these were "expensive" soldiers who would fail to perform satisfactorily even after an investment of special training had been made in them. In rebuttal to this argument it should be stated that this investment consisted in approximately eight weeks of special instruction. There are several ways of estimating the costs involved. With a present length-of-service requirement of twenty-four months for inductees, special training of an average of two months would cut the effective service of the soldier by a considerable percentage. However, several adjustments could be made. It is possible that the Congress would permit the Armed Services to give a man special instruction for a period of up to three months without counting it as part of his minimum service.

Even if Congress did not do this, a high percentage of the illiterate and uneducated might voluntarily extend their service to compensate for their special training. If either of these adjustments were made, the most serious current cost to the Armed Services would be covered. It is true that some additional funds would have to be provided to feed and house these men for the period of their special training, as well as to pay for the special instructors.

But the attitude of the Armed Services on the cost-return proposition rests not so much on the additional costs of the special training as on a pessimistic appraisal of the return. It is on this point that the detailed and objective analysis of the performance records of the graduates of the Special Training Units during World War II has the most direct bearing. Although the Armed Services themselves have carried out a series of small-scale studies which point to the conclusion that the poorly educated failed to do as well in training as the better educated, they have no firm basis for assessing the relative performance of each group after training was completed. Moreover, it is surely not necessary to argue that the poorly educated perform as well as the men with good education or high intelligence. All that is necessary, and this is the importance of the World War II analysis, is that once they have had the advantages of special training, the poorly educated perform at an acceptable or even higher level.

It is impossible to counter the claim of the Armed Services that the induction of a large number of men who would require special training would be a more expensive undertaking than if they could continue to rely on men who did not require such training. But before any conclusions about the financial advantage can be reached, consideration must be given to the "hidden" costs of the present process of rejecting large numbers of the poorly educated. They may be so considerable as to outweigh the rather small costs that would be involved in the establishment and operation of special training units.

In any military organization, there are a large number of jobs that must be done by military personnel, jobs that demand little education and skill. It may be that the Armed Services accept from among those who secure a passing mark on the screening

examination a sufficient number of individuals of limited background for these assignments who will not react negatively to the type of work that is required of them. But evidence is available to indicate that a considerable number of better qualified persons have been forced in the past and also at present to undertake routine military assignments which are personally frustrating and nationally wasteful because of the very poor use which is made of these persons' background and competence.

The final mission of the Armed Services is to prepare an effective fighting force which if called upon can perform in a superior manner. The major objective of Army manpower policy must be the training of combat forces—infantry, artillery, and armored. There would be much more reason for the negativism of the Armed Services toward the poorly educated if there were a positive correlation between the amount of education achieved by a man and his willingness and competence to serve as a fighting man. But such a correlation cannot be found. The studies that are available point in the opposite direction—a man's willingness to serve in the infantry is inversely correlated with his education. The Armed Services may be handicapping themselves by an overevaluation of formal educational background.

It is not surprising that the Armed Services, uncertain of what the outbreak of hostilities in Korea presaged for the future, drew a parallel with conditions as they existed in 1940. In short, there was an emergency. During the emergency it was expected that the Armed Services would be rapidly increased in order to establish an adequate base in the event of full mobilization. During this period of very rapid expansion there was considerable justification for the Armed Services to postpone the acceptance of educationally handicapped persons on the theory that they had no time to spare to give them special training and that these men, even if trained, would not be suitable for cadremen. But this theory, even if it were valid earlier, has little merit at the present time when the forces are at their authorized maximum, and when the international situation although not propitious, is at least not as threatening as it was shortly after the outbreak of hostilities in Korea.

There are at least two objections to the continuing backlogging

of large numbers of poorly educated in the pool of rejectees with intent to call them into the service at a later date. The first and most obvious point is that they will not be nearly as effective as soldiers without the benefit of a period of training during which they could acquire basic literacy. Moreover, serious problems arise whenever the Armed Services suddenly revise their standards downward. They tend to be flooded then with the large numbers that have been backlogged and find it very difficult to fit so large a group with a specific handicap into a going organization. For all these reasons, then, the third assumption of the Armed Services, that it would be best to leave the uneducated in the civilian economy and call on them only in a possible future emergency appears no more valid than the first two.

As to the fourth assumption that the Armed Forces Qualifications Test is adequate as a screening device, it is necessary to distinguish between what the staff experts recognize to be the facts about this test and the operational uses which are made of it with the approval of the senior commanders. The military experts know that the test, whatever its virtues may be, cannot evaluate the literacy of persons who have no knowledge of English or the intelligence of a person who cannot read and write English. The test may well be a reasonably good instrument for discerning how literate people will do in certain types of Army training, but it will not help at all in estimating the performance of an illiterate or poorly educated man. There may be relatively few objections to continued use of the test as long as the Congress and the public are willing to permit the Armed Services to reject intelligent, if uneducated, persons. But it is important for the non-expert to recognize how very little the test tells one about the present and potential qualities of those who fail.

The final assumption that we have singled out for critical review is that in the absence of a valid scientific basis for evaluating various types of manpower, particularly marginal manpower, for military service, a research program should be directed at the development of appropriate scientific instruments. This seems like a reasonable position until it is recalled that the Armed Services could have evaluated the experience of World War II if they had been convinced of the urgency of the problem. More-

over, it is questionable whether the conventional types of personnel research that the Armed Services are employing, directed towards the perfection of measurement instruments, will ever yield significant answers. The need is for "live" experiments, in which large numbers of illiterate and poorly educated men are taken into the service and trained, and whose performance records are then carefully assessed. Although the Armed Services have undertaken one or two minor investigations of this type, they have for the most part limited their concern to the way in which the group of the uneducated performed in training in comparison with a group with average educational backgrounds. Experimentation in manpower selection and utilization can never be limited to psychometric approaches. Since the Armed Services were forced to improvise a program during World War II with a resulting wastage of time and resources, it becomes that much more important to make use of a period like the present to acquire experience and technical competence in dealing with a problem of this nature. One of the major losses in a period of partial mobilization can be the loss of time and experience.

The Armed Services, in an understandable desire not to complicate their present difficult problems, have backed away from an aggressive program which would enhance their knowledge about and confidence in utilizing the poorly educated. The cost has been not only the weakening of their military manpower reserves which they would sorely need in case of a major emergency but the failure to qualify their leadership effectively to meet this challenge.

There remains one overriding consideration which indicates that the present policy should be altered. Our military manpower policy is governed by the Universal Military Training and Service Act. This Act declares that the obligation to serve in the Armed Forces is to be "shared generally by all men between the ages of eighteen and a half and twenty-six" under a system of selection which is "fair and just." The National Manpower Council pointed out in its study of "Student Deferment and National Manpower Policy" that "it is always difficult to draw a firm line between those who should and those who should not be accepted for military service. But standards for induction which result in the rejection of large numbers of young men violate the principle that

compulsory military service should be as nearly universal as possible." The Council therefore recommended to the Secretary of Defense that he establish "more realistic standards for induction and enlistment so that the Armed Forces can accept large numbers of men now being rejected because of minor educational, physical, or emotional handicaps, or because of a record of minor delinquency." The logic of this position seems impregnable: "In a democracy, whenever the Armed Forces meet their manpower needs through compulsion, there is an obligation to the individual and to the nation that service be as nearly universal as possible."

CHAPTER 13

HUMAN RESOURCES POTENTIAL

ALTHOUGH it is not necessary to summarize in this last chapter the findings of fact made and the theory developed throughout this book, it may be helpful to identify the major conclusions which bear directly on the problem of the uneducated as well as those which have pertinency for the broader problem of the conservation and effective utilization of the nation's human resources. The major objective of this last chapter will be to raise significant questions of public policy that grow out of the preceding analysis, and to indicate lines for constructive action. All too long the social sciences have been retreating from the lines of action. As their tools of analysis were improved, social scientists became increasingly aware of the intractability of the materials with which they were dealing, and accordingly became more and more intimidated about their ability to contribute to the solution of complex social issues. Many investigators, including some of the most able, hesitate to end their work with more than a statement of the additional work required before sound conclusions can be reached.

Caution, modesty, and restraint are necessary virtues for the serious-minded researcher. Since social problems are the meat of political debates in which many protagonists are conspicuous by their lack of objectivity, small knowledge, and deliberate attempts at falsification, there is excellent reason for the conscientious scholar not to make excessive claims about the results of his studies, particularly as he relates them to public policy. But although reasonable caution is a virtue, excessive caution that is

transformed into evasion is a vice. If the scholar has had the insight to identify an important problem and has been able to investigate it, he cannot escape his obligation to share with others his discovery and its bearing on their actions. The Aristotelian insight that man is a political animal was never more pertinent than in assessing the role of a social scientist in a democracy.

Men frequently act upon a theory even when they are not aware of the theory on which they rely. This fact has important consequences, for if the results of an investigation are not related to current policy, existing theory remains entrenched. Nothing is done to improve it, at least not immediately. The social scientist hides behind the need for more time and more study. There is nothing contradictory, however, between his search for better solutions, which may well require more time and more study, and his willingness to make at least a partial contribution to the present level of knowledge and the present level of action. Surely judgment and perspective are needed to distinguish those parts of a completed investigation which are sufficiently sound to justify using them as a guide to public action from those which are at best useful only as leads for further study.

There is an additional safeguard that the scholar can use. In those instances where he feels sure about the burden of his facts and the reasonableness of his conclusions, there may still be significant alternatives when it comes to translating them for the realm of action. The very complexity of society implies that it is never possible to consider action in one area without simultaneously considering the implications for other areas. A conservative and a liberal may have honest differences of opinion about how to proceed in attacking a particular type of social pathology that a scholar has illuminated and evaluated. The scholar, as a citizen, is surely entitled to have preferences and to express them, and to argue in favor of his position. But he can do so while knowing that others may draw different inferences from his studies. Moreover, they may be closer to being right than he is. The man who knows the most about a subject does not always know best what to do about it.

To find concrete illustrations of these abstract propositions about theory and action, one need only refer to materials which

have been presented in earlier chapters. It was frequently noted that early in World War II the military manpower experts reached the conclusion on the thinnest of evidence that most men who had not completed a fourth grade education would fail to make adequate soldiers. For a year and more, decisions of national importance were made on the basis of this theory. Later on, circumstances changed, and so did the regulations; the military found itself engaged in a large-scale educational enterprise which helped a large number of illiterates and poorly educated persons to achieve a basic literacy. Although the experience was considerable, there was little opportunity to study and evaluate it because of the exigencies of war. Once again, a theory (based on little evidence) became dominant; the graduates of the special training units were considered expensive soldiers in that many of them failed to meet the standard required in modern warfare. Since the outbreak of hostilities in Korea military manpower policy has been much influenced by this theory.

A similar illustration can be drawn from civilian life. On the basis of a very few facts, industry came to the conclusion that the more education a man had the better worker he would be, and so instituted screening devices that erected barriers to the employment of anyone who did not have a considerable amount of education. When the required number of persons with a stipulated amount of education were not available, a reduction was made in the screening standards, but reluctantly and only as a temporizing device. Very few studies have been made of the relationships which do exist between a man's educational background and his performance at specific levels of work. This much is certain, there is probably as much evidence available which would question the conventional theory on which industrial practice is today based as there is to substantiate it.

Some social scientists may question the statement that it is the obligation of an investigator to make explicit the policy implications that grow out of his researches. This philosophy nevertheless underlies the present investigation and all of the companion studies which are being carried out as part of the large-scale project on the Conservation of Human Resources.

The relation between this study of the uneducated and the

broader focus of the Conservation Project should be reviewed here. Convinced that the principal wealth of a nation is found in its people—their number, character, and ability—the Conservation of Human Resources Project is directed to learning more than we now know about the factors which contribute to or retard the full development of human potential. Because a beginning had to be made somewhere in the immensity of the subject, we selected areas about which considerable evidence had been accumulated which pointed to the waste and underutilization of human resources. The Selective Service experience of screening the young manpower of the country during World War II and the additional experience of the Army in its large-scale schooling effort to help many recruits achieve a basic literacy provided a rich body of personnel material that was likely to shed considerable light upon one important aspect of the underutilization of the country's human resources. We recognized also that it would be possible to supplement these materials with facts and experience drawn from industry.

In addition to the attempts to identify the areas of waste of human resources, a further bond ties the several facets of the Project together. Every investigation is focused on one or another aspect of *work* and its central importance for the life of the individual and for society. In studying the uneducated we have concentrated on the relation between education and work performance. This parallels a study of *The Ineffective Soldier,* which is focused on the relation between personality and work performance. A third study, on talent and superior performance, again seeks to explore a related set of factors. It is against this background that we shall review the major findings which have emerged from our study of the uneducated and the implications we believe these findings have for public policy.

The outstanding finding that emerges from this study of the illiterate and poorly educated population is the scale of the problem. On the basis of the comprehensive screening of young men during World War II more than 700,000 men were permanently rejected for military service because of low mental level; more than 400,000 illiterates were taken into the Armed Services; and another 300,000 who enlisted or were drafted had had little edu-

cation and were slow learners. In short, almost 1.5 million younger men out of 18 million registrants presented a serious educational problem. Confirmatory data were uncovered in the Census of 1940, which showed that 12 percent of the employed males in the United States had less than five years of schooling. In a country that has long stressed the importance of public education as a foundation stone of personal and national development, and in a country that has had one of the highest standards of living in the world, the magnitude of the problem of the totally uneducated and the poorly educated is a striking phenomenon.

Yet the central figures could be easily interpreted in a different light. It could be argued that the striking fact about the illiterate and uneducated population is the extent to which it diminished so that today it is nothing more than a residual problem. As late as 1890 there were more than 6.3 million illiterates in the United States, or approximately one out of every seven persons. In 1950 there were a total of about 2.5 million illiterates, or about one in fifty.

The changes which have occurred within the major subgroups of the illiterate population between 1890 and today are even more striking. The extent of illiteracy in the native-born white population has declined from more than six percent in 1890 to less than one percent today. Although the decline in the amount of illiteracy among the foreign-born population, which stood at 13 percent in 1890, has not been nearly as rapid as among the native-born, there is every reason to anticipate that the immediate future will show a very speedy decline, because the older members of the foreign-born group will die, and our immigration laws have not permitted many people to enter the country since World War I. But that illiteracy is a residual problem is really proven by the changes in the Negro population. In 1890 more than one out of every two Negroes was illiterate; today the comparable ratio is approximately one in ten.

The two interpretations advanced above appear contradictory. The first holds that the number of illiterate and poorly educated persons in the population is excessively large considering the importance which our society attaches to education, and considering further the economic resources available to us for the support

of public services, including education. The second stresses the tremendous advances which have been made both in absolute and in percentage terms to eradicate illiteracy among the American population, the most outstanding of which is the transformation within the last six decades of the Negro population from a predominantly illiterate to an overwhelmingly literate group. But these two interpretations can be reconciled.

In consonance with the position outlined at the beginning of this chapter that it is incumbent upon the investigator to point out the policy implications of his findings, the question must now be faced whether special action is called for by the Federal Government acting for the nation or whether it would be best for the country to rely upon those powerful forces which have been at work in the past to continue in the future. It is difficult to exaggerate the importance of the year in which this question is raised in trying to reach a balanced answer. The best way to illustrate this is to contrast the factors in the current situation with those which have prevailed throughout most of our history.

Traditionally, education, especially basic education, has been a local and state responsibility. The extent to which different regions and localities in the country were interested in or able to discharge their educational responsibilities effectively, though a matter of concern to educators and other citizens who placed a high value on education, was hardly a national issue. By and large, most local communities apparently were able and willing to meet their responsibilities, and there did not seem to be reason for major concern about the areas of the country where educational facilities were poor or non-existent. This attitude of general disinterest was reinforced by the fact that the major region of the country encountering difficulty in providing basic education was the Southeast, which until recently received little understanding, sympathy, or support from the rest of the country. The general disinterest in the educational problem of the Southeast can further be explained by the fact that in that area so many of those affected by poor educational facilities were Negroes.

Why is it a serious error for the country as a whole to continue to disregard the consequences that flow from regional deficiencies in meeting the obligation of providing a basic education for every

American child? Why is it unwise to rely on time alone to solve the problem when we have seen that time has done so much to alleviate it? It is always difficult for people to realize that the world in which they grew up and the world to which they became accustomed will change. However, consider that in only two years since 1940–1948 and 1949–has the youth of the country been free from compulsory military service, and even in these two years, when the inductions under Selective Service were suspended, there were young men in the Army completing their obligatory term of service. And there is no likelihood that the use of compulsion can be dispensed with in the near future. The nation's need for manpower that can be easily integrated into the Armed Forces and speedily trained is but one of several reasons that any previously unconcerned attitude toward regional and local deficiencies in the provision of basic education should no longer be tolerated.

Even prior to World War II it had been contended that it was a serious error from the viewpoint of national policy to ignore the consequences of the fact that a large number of localities within a considerable number of Southern states were not yet able or willing to provide all of the children with an adequate opportunity to acquire a basic education. This group argued that the traditional viewpoint that education was a state and local, and not a Federal, responsibility could hardly be sustained in the face of the national consequences of the failure of local government to meet its responsibilities. The protagonists of Federal aid argued that it was unfair to the individual and foolish for the country to tolerate the continuance of substantial pockets of illiteracy. Clearly their position is very much stronger today in the face of the responsibilities that confront the nation–not only for its own future but for the future of the free world–to raise and maintain large armed forces and at the same time to be as productive as possible in raising food and in manufacturing goods. It is beyond argument that the Armed Services were handicapped in the scale and speed of their mobilization of manpower in World War II by being forced to make a series of special adjustments to cope with the very large numbers of illiterate and poorly educated persons in the draft-eligible ages. Although the military manpower pool has not been nearly as low since the outbreak of hostilities in

Korea as it was during the latter part of World War II, stringencies are now beginning to appear, and they will doubtless increase. Once again, the very large numbers who have been rejected on mental grounds hold an important clue to the answer to this problem. But the real danger lies in the future, in the eventuality that the United States would be forced to go to full mobilization. In such an event, time would be of the essence, matched only by the convertibility of civilians to soldiers. It would be most unfortunate indeed if at that time the Armed Services would have to devote time and scarce resources to literacy training.

Although considerable stress has just been placed on the relation between illiteracy and national security, the justification for national concern with the problem of the uneducated goes beyond this single fact. We have reviewed a considerable body of evidence about the very large-scale technological changes under way in the Southeast which will result in the region becoming less and less agricultural and more and more industrialized. In 1890 two out of every three persons in the South earned their livelihoods in farming; today this is true of only one in four. We also found, however, that the majority of illiterates and those with less than five years of schooling, are very heavily concentrated in agriculture. The problem therefore arises of how this handicapped population which is being increasingly forced off the land can find a place for itself, either in the South or in other regions of the country.

The experience of Southern industry and, even more particularly, the experience of Northern industry pointed to the fact that there are major barriers in the way of absorbing even a small number of illiterates into an industrial organization that has adjusted itself to a literate work force. We found that even though the illiterate person could frequently learn to become a machine operator without particular difficulty, industries would hesitate to employ him because he would be unable to meet the ancillary responsibilities of work in a large organization such as filling out blanks, reading work orders, and keeping records.

It has always been one of the major strengths of the United States in contrast to European countries that it has a relatively mobile working force that is willing to pull up roots and move

whenever better economic opportunities loom on the horizon. The last decade indicated that this national characteristic of mobility was still present, particularly in the South which lost approximately 3 million persons to other regions between 1940 and 1947. If this large-scale out-migration from the South continues, and there is good reason to believe that it will, then it becomes very important for the entire country, as well as for the specific individuals who are in search of a better way of life, whether the migrants possess the minimum qualifications which will ease their adjustment into the economic and social life of the communities into which they migrate.

One related facet of these changes which are going on in the economy of the South bears more on those who seek to remain on the farm than on those who leave for industrial employment elsewhere. Southern agriculture is undergoing a major revolution. From a one-crop system, in which the entire wealth and welfare of the Southern farmer was dependent on cotton, tremendous strides have been made toward diversification, particularly in the development of dairy farming. In this transition, smaller farms have been consolidated, and considerable mechanization has followed. Of course, in many instances the original farms were sufficiently large to justify mechanization. It appears that scientific farming, although it can be carried on by an illiterate person, can usually be carried on much better by one who can read and write. The new owners of farms in the South have an understandable preference, therefore, for the man who is literate. The illiterate person is thus having greater and greater difficulty in maintaining even a peripheral position even in the less advanced economy of the South.

In addition to these important reasons relating to our military security and our economic well-being, there is another reason for national concern with the problem of illiteracy. No matter how much we may regret it, the classic foundations of our democracy—local responsibility and local participation—have undergone major changes in response to large-scale industrialization and urbanization. Many years ago it was possible for an illiterate citizen to be sufficiently well-informed about the major problems on which he had to form a judgment through word-of-mouth discussions with

his neighbors. And he was able to share in the determination of public policy through participation in his town meeting. But that day is gone. It is not possible for our democracy to remain strong unless the citizenry is able and willing to inform itself about many and complex issues that far transcend local problems. And this can be done only if each individual is able to read, and read critically. We are very concerned these days with our external security, but we have every reason to be equally concerned about our internal strength. Almost two hundred years ago Adam Smith argued the case for educating the populace on the ground that men who could read and write would be better able to resist the political appeals based upon emotionalism. It does not follow necessarily that if a population is literate, it is immune to political foolishness—witness the Germans under Hitler. But Smith's position is sound to the extent that there is greater hope for the continued stability and growth of a democracy if its members are able to evaluate the issues after considering the conflicting claims of the proponents of different measures.

One further comment should be made about the relation between illiteracy and American democracy. We are currently engaged in a struggle with Soviet Russia, which is not only military but also ideological. The United States and Soviet Russia are each trying to convince those who are not yet committed to one side or the other that its way of life is the best. Much of the struggle centers on Asia, and it may not be long before it expands to include Africa and South America. All three continents are characterized by the fact that the predominant part of the population is illiterate. But there is movement afoot among the native population to improve their lot. High among the objectives is the conquest of illiteracy. Soviet Russia has apparently made substantial strides within its own borders in eradicating illiteracy and it uses this progress as a major weapon in propaganda. Furthermore, the Communists have repeatedly called attention to the fact that our country, which boasts so much about its standard of living still has such a considerable number of illiterates in the population. Here we have still another reason for national concern with the problem.

There has grown up in American judicial interpretation the

concept of business "affected with the public interest," by which the courts have sought to distinguish the area in which the Federal Government has a basis for interference from others in which Federal action is precluded. The burden of the analysis which has just been made of the significant impact of illiteracy on matters of national security, economic well-being, and the general welfare of our democracy underlines the national, as well as the state and local, interest in the problem of illiteracy. The position of the United States in world affairs emphasizes that, reliance upon the remedial action of time alone is unsatisfactory. There are too many dangers and too high a cost involved in temporizing. It is, however, always easier to outline the desirability of purposeful action than to specify the type of program which has reasonable promise of success. Such an attempt must nevertheless be ventured.

Illiteracy, when it does not result from mental disease or serious mental retardation, reflects one of two conditions. Either the individual has not had any opportunity to attend school, or he attended a poor school for a short period of time. The screening for military service during World War II indicated that a considerable number of the men who were examined had never attended school. We have seen, however, in our review of the changes which have taken place in the last two decades that it is increasingly rare for children to escape school completely. In 1940 one out of every ten Negroes in the country had never attended school; the preliminary report of the 1950 Census reveals that the ratio had dropped to less than four out of every hundred. Today, except for very special populations, such as the Navajo Indians and migratory families, all children who do not suffer from a pronounced physical or mental handicap attend school. Thus one of the major causes of illiteracy in the past has been substantially eradicated. In seeking the major cause of continuing illiteracy attention must henceforth be directed not to a lack of opportunity for any schooling but to a lack of adequate schooling.

The major factors involved in the adequacy of schooling are the length of time that a child remains in school and the quality of instruction which he receives. In our study of "The Accommodation of Education to Society" (Chapter 2), we found that by 1940 all but a very small number of white children and a some-

what larger number of Negro children between the ages of ten and fourteen were still in school. Although the detailed analyses from the 1950 Census are not yet available, preliminary figures indicate that the situation has continued to improve, particularly with respect to Negro children. This reflects the greater availability and use of educational facilities in the South and the fact that during the past decade many Southern Negroes have migrated from rural to urban areas and thus obtained easier access to schools. Again, except for such special groups as Navajo Indians and the children of migrants, it can be postulated that all children tend to remain in school for a sufficient number of years to acquire basic literacy. Why then do the figures continue to show that large numbers leave school without a basic knowledge of reading, writing, and arithmetic? The cause must be sought in the quality of the schooling which they receive.

We called attention in Chapter 12 on "The School and the Community" to the fact that a considerable number of white children and a still larger number of Negro children leave school without having successfully completed five years of work. A special study in 1947 indicated that one out of every six Negro male children between the ages of fourteen and seventeen had not completed five grades, and the presumption is that if they had not done so by this age, they would be unlikely to in the future

What lies back of this continuing failure of the schools as reflected in the considerable number of children leaving school without having acquired the rudiments of basic education? There is no simple explanation, but a series of factors operating in the rural areas of the Southeast, the center of the major deficiencies, are helpful in illuminating this problem. The evidence has been presented in earlier chapters. The per capita income of the South is much less than in other regions of the country; in 1950 it was less than $1,000 while the national average was only slightly below $1,500. Certain states in the South, such as Mississippi, had an average of even less than $700. With less income being produced, the South was forced to support a much larger number of children per productive worker than the rest of the country. The difference was very substantial: for instance, in the Northeast, the number of children between the ages of five and seven-

teen equaled 30 percent of the productive workers between the ages of twenty and sixty-four; in the South the ratio was 44 per 100, or almost 50 percent more than in the Northeast. Although most of the Southern states contributed to the support of education in proportion to or more than most of the other states, the absolute amount available per school child was much less than that for the nation as a whole, and much below that of the wealthiest states. In 1951–52 the national average amounted to $216, and two or three states averaged over $300. Ten Southern states averaged $150; the range was wide and began with Mississippi which had an average expenditure of only $88. And even these comparisons understate the variation for that group in the community with the highest rates of illiteracy—the Negroes in the rural South. Most of the Southern states spend very much more for white pupils than for Negro pupils, and they spend the smallest amount for Negro pupils living in the country.

These figures help to explain the fact that each year an estimated 125,000 illiterate children are moving past the compulsory attendance ages. It is easy to see why one expert concluded that "the provision of adequate elementary schools and the strict enforcement of compulsory attendance laws is the best way to stop illiteracy at its source."

What, then, are the options that face the country with respect to the elimination of illiteracy at the source—among those now of school age and those who will come of school age in the future? There are at least four alternatives. The first can be called a "do-nothing" program; it would hold that the Federal Government take no special action. The second approach could be called a "do-something-about-illiteracy" program, and would include the use of Federal funds specifically for the eradication of illiteracy. The third could be characterized as a "do-something-for-education" program, and would direct additional effort and resources to raising the quality of education in general, without concentrating on the problem of illiteracy. A fourth approach would be still broader, a "do-something-for-the-poor-states," program, and would include Federal assistance not only for education but for the gamut of services that have to be supported by the taxpayer—health, roads, public assistance.

Although there are good reasons to raise questions about the present structure of Federal grant-in-aid programs, and to review the basic considerations in the area of Federal and state financing, the fourth alternative mentioned above cannot be properly explored within this context. It should not, however, be completely ignored; and it definitely warrants consideration at such time as political leadership makes it possible to come to grips with some of the fundamental problems of present day federalism.

In light of the analysis earlier in this chapter which demonstrated that illiteracy is definitely a problem "affected with the public interest" because of its direct bearing on national security, economic well-being, and the general welfare of our democracy, the first alternative of a "do-nothing" policy need not be further considered. However, because of the strength of the American tradition that education is a primary responsibility of the state and the locality, it might be well to point out that Congress has recognized the desirability of utilizing Federal funds for educational purposes in response to special problems that have arisen as the result of our preparedness program. The country has acknowledged the logic of aiding in the construction and operation of schools in districts where the population has been suddenly and drastically increased in response to special defense work. If it is reasonable for the Federal Government to take cognizance of the special burden which falls on communities as a consequence of the building of a military air base or the erection of a munitions factory on the assumption that the future security of this country depends upon such installations, it would seem as reasonable for the Government to recognize that other communities are unable to provide an adequate education for all children of school age. Assuredly the future security of the country depends as much upon these children as on another air base or additional rounds of ammunition.

We have considered and put aside, then, the alternative of doing nothing as well as the extreme alternative of trying to remodel the entire system of state-Federal fiscal relations. The remaining alternatives are a program designed to be a direct attack on illiteracy and one which would constitute a more indirect approach of raising educational standards in general. The first one is appealing. After all, illiteracy is a much more limited problem

than the quality of education in general, and it is always easier to single out smaller problems for direct attack and leave the larger ones for the combined efforts of the entire community. However, there are objections to the direct approach.

If the source of illiteracy is weakness in the elementary school system, then a program to be successful must be directed toward overcoming these weaknesses. We have seen that they consist in poor school buildings, crowded classes, poorly prepared teachers, and poor curricula. These shortcomings permeate every part of a weak elementary school system and express themselves in a series of failures, the most conspicuous of which is illiteracy. A moment's consideration will indicate that in the search for remedial action it is not possible to limit consideration to the elementary school alone. Properly qualified teachers are clearly a product of their own education—the amount of their high school and college instruction and the type of instruction to which they were exposed. Shortcomings in curricula are directly related to the higher educational institutions on which the state system depends for leadership.

There is another objection to the Federal Government's directing its efforts specifically toward helping the states attack illiteracy. Despite the evidence which we have adduced about the substantial economic difficulties facing the Southern states in particular in meeting their educational responsibilities, it would be difficult to prove that they did not have the required resources if their one and only educational task was the elimination of illiteracy. That they could well do with their own means. But they have many other responsibilities for general education and vocational training. They find it difficult to meet the full gamut of these responsibilities. It is therefore sounder to identify their handicap as it really exists, namely, inadequate resources to provide broad educational opportunities for all citizens who are desirous of taking advantage of them.

The best alternative then, would be a program aimed at raising the level of education in the poorer states. But there still remains choice in procedure. The present pattern of Federal grant-in-aid programs makes Federal funds available to every state, with more funds going to those which have the greater need. Those who question the necessity of having the richer states contribute addi-

tional taxes to the Federal Government in order to receive part of them back as a grant-in-aid are reminded by the proponents of this approach that this is the only practical method of securing sufficient Congressional support to have a grant-in-aid program enacted into law. This may be so, but it may simply reflect a lack of political leadership and public understanding. Since many question the wisdom of involving the Federal Government in education any more than is necessary, it might be desirable and practical to formulate a program which is specifically delimited to aiding only those states which have the greatest need and for only so long as this need exists. The public should recognize the facts of public finance. A grant-in-aid program is always a program whereby money is contributed by the well-to-do and given to those with less resources on the assumption that the transfer will result in a net social gain. What possible logic is there, therefore, in a procedure which takes still more money from the well-to-do in order to return part of it to them and thus try to hide the essential core of the transaction, which, as we have seen, is for the strong to assist the weak.

A program which aimed at assisting the poorer states is not difficult to outline. The basic procedure would be to make Federal funds available whenever a state has a tax rate on behalf of education in proportion to or above the national average and where the yield from these taxes provides considerably less per pupil than the national average. This implies two criteria for Federal help: a tax effort above the national average and a yield below the national average. We know that under this system the states in the Southeast would receive considerable assistance. Several other states would also qualify for aid under this plan. Because of the former large discrepancies in expenditures for the Negro and the white pupils in all Southern states, it would be important for the Federal Government to establish certain safeguards against the discriminatory use of these funds. It might also be possible to recommend, if not to stipulate, certain minimum standards which would raise the level of the poorest schools and thereby contribute most directly to the eradication of illiteracy. Such monies could be given in a manner which would leave a maximum degree of discretion and responsibility to the state and the locality.

Before concluding a discussion of the potentialities of Federal assistance, special note must be taken of two facets of the problem of illiteracy which fall specifically within the orbit of Federal responsibility and where inadequate action in the past has made the Federal Government itself a major accessory to the persistence of illiteracy. We noted earlier that one of the worst concentrations of illiteracy is among the Navajo Indians, who are the wards of the Federal Government. There may have been some justification many years ago for a policy which interfered as little as possible with the Navajos' way of life and customs. But we have seen that that day is past because large numbers have had to leave the reservation, where they can no longer find a source of livelihood. Our treatment of the American Indian has surely not been worthy of our best traditions. Now that he needs assistance to help him build a bridge from his isolated culture into the world about him, it is incumbent upon the Federal Government to do its utmost to compensate for past neglect and to make a maximum contribution to his successful integration in the outside world. Several years ago Congress acknowledged this obligation by passing a long-range and farsighted program aimed at assisting the Navajo. Adequate appropriations have not been forthcoming, however, to implement the plan. Here is one area in which the Federal Government has direct responsibility to work aggressively for the reduction and elimination of illiteracy. Solutions will not be easy. It is next to impossible to bring schools to the Navajo, and it therefore will be necessary to bring the Navajo to the schools. But the fact that the problem is difficult only reinforces the responsibility of the Federal Government to act in a generous and farsighted manner.

One of the other major areas where illiteracy is bred is among the children of migratory farm workers who, as we noted earlier, can be subdivided into two groups: a Negro group based primarily in Florida, which moves north along the Atlantic Seaboard; and the Spanish American group based in Texas, which fans out toward the north and west. Since these families cross many states, and are in fact only nominal residents of any state, the responsibility of the Federal Government is clear. What may not be clear is how the Government can discharge it effectively. Money is surely not

a solution for everything, but it is not comforting to realize that the Federal Government spends many times as much on assistance to migratory birds as on assistance to the children of migratory families. It may well be that the only basic solution to the problem of educating these children will be found in the eventual disappearance of the institution of migratory labor. However, this is not likely to occur overnight. Temporizing and partial solutions are therefore very important. It goes beyond the province of this chapter to recommend the detailed measures which the Federal Government should take, in collaboration with the states which reap the benefit of this migratory labor, to insure that the children of these parents do not become handicapped for life. It is very important for the Federal Government to develop a realistic social accounting system as a basis for action which would take cognizance not only of the economic contribution which the adult migrants make to the agriculture of today, but also to enter the large debit figure which would reflect the impairment of their children's prospect to earn a livelihood and participate fully in the responsibilities of citizenship tomorrow.

These are the major considerations that bear on the eradication of illiteracy at the source. Passing reference must be made, however, to the opportunities which exist to reduce, if not to eliminate, illiteracy among those who are past school age. Very little attention has been paid in this book to programs directed specifically to the eradication of illiteracy among adults in civilian life. This is because past efforts have been limited and, although they could doubtless be improved in the future, would still be beset by major hurdles. The Office of Education recently estimated that in 1949–50 fewer than 30,000 native-born adult illiterates were enrolled in classes which had been organized especially for them. There are a series of reasons which help to explain the limited success of these programs. Outside the large cities there has always been a shortage of courses developed specifically for the illiterate. Well-qualified teachers and suitable instructional materials have been scarce both in the city and in rural communities. But the major reason lies with the illiterates themselves. Few of them have the strong motivation which is needed to overcome their handicap. Most illiterates must work hard to earn their livelihood

and at the end of a working day, only the exceptional man, or the man under exceptional stimulation, can discipline himself sufficiently to devote hours to study.

Undoubtedly much more can be done through campaigns which would elicit the full cooperation of various groups in the community, industry, trade unions, fraternal organizations, and teachers associations. The Office of Education recently recommended that such campaigns include the following activities:

Stimulating the formation of local classes

Developing cooperation between state education departments and institutions of higher education in the training of teachers of adults

Working out cooperative arrangements with local draft boards for the identification of undereducated registrants

Encouraging employment agencies, employers, personnel managers, social agencies, churches, and other community agencies to identify illiterate adults and encourage them to seek instruction

Building attitudes in the community which make it easy for the undereducated to attend classes

Helping local communities with their own literacy campaigns

But the major prospect of significant gain is to be found not in the civilian community but in the Armed Services. For here schooling can become again for the young adult the center of his daily work rather than the periphery. There is overwhelming evidence, not only from the experience of the American Army in World War II but from many foreign armies, that the period of military service can be used with excellent effect to teach a man basic literacy as well as to give him the specific training that he requires to function effectively as a soldier. But at present the leadership of the Armed Services entertains a deep conviction that development of literacy is not their responsibility but is the responsibility of the civilian community.

The Armed Forces are under constant pressures to undertake incidental or peripheral missions. Those interested in health would like them to engage in large-scale medical rehabilitation. Those interested in the moral standards of the country, particularly in the morals of the young, urge the Armed Services to devote time and effort to character building. Others, who have a deep interest in vocational guidance, believe that there is no agency better suited

to counsel the young about their occupational alternatives than the Armed Services. These and many more pressures make it inevitable that the Armed Services hesitate to undertake such a large-scale venture as would be involved in the induction of the very large numbers who now fail to pass the mental screening test and to establish the requisite structure for teaching them the three R's. The Armed Services see danger in undertaking secondary missions: they will be more vulnerable to the charge that they are trying to take over the whole of society; they recognize that every tangential effort must deplete their ability to accomplish their primary mission to train men to become soldiers. An additional factor contributing to the disinclination of the Armed Services to assume any of these rehabilitative missions, including specifically the special training of illiterates and the poorly educated, is their conviction that such special effort will not yield any large number of men who will perform effectively as soldiers.

There is no doubt that the Armed Services have good and sufficient reasons to shy away from a large-scale educational job at the present time. Yet, careful consideration must be given to the alternative. Despite the exigencies of World War II it was not possible for the Armed Services to avoid establishing a large-scale special training project at that time. They were forced into it because the manpower reserves were running low and the public refused to countenance the drafting of fathers and grandfathers while young men in perfect health and of sound mind were rejected because they were unable to read and do simple sums. There is general agreement that if we should again be confronted with a major emergency, our manpower position will be much more vulnerable than it was during World War II. During the first year after the outbreak of hostilities in Korea, more than 300,000 men were turned down for military service because they failed the educational examination. Since that time the figure has grown still larger. The Director of Selective Service has emphasized that he will shortly be confronted with some unpleasant choices: he will have to reduce the number of deferments now being granted for essential work in industry or agriculture and for study; he will have to recommend the calling up of fathers; or the Armed Services will have to agree to take larger numbers of men whom they are

now rejecting. It is possible that before too long all three adjustments will be required.

We noted in the preceding chapter that in the event of full mobilization the Armed Services currently plan to accept the more intelligent of the men whom they are now rejecting for failure on the educational examination. In view of this it becomes more difficult to understand the continued resistance of the military to take steps aimed at remedial action in advance. Although basic education is definitely a civilian responsibility, logic alone does not lead to constructive action. During the early part of World War II the same type of verbal barrage was laid down with no effect. Although much can be done in the future to reduce and possibly even to eliminate illiteracy at the source, even the most optimistic estimate would point to the conclusion that there are still very large numbers of men in the younger age groups who would be needed in the event of a future emergency who could not profit from such a fundamental reform, for they are past the school age.

It is difficult to understand why the Armed Services want to delay a remedial training program until an emergency eventuates. It would be so much easier to undertake it in a period like the present when although pressures exist, they are of entirely different order than would confront the country during a world conflict. As we pointed out earlier if the Armed Services undertake large-scale special training at the present time, adjustments would have to be made—such as a lengthened term of minimum service for those who receive special training, an increase in funds and in personnel ceilings to carry the overhead structure. But it would surely seem to be sensible public policy to grant the Armed Services these minor adjustments. After all, the present period of partial mobilization implies that the country is seeking to build up its strength in the hope of preventing a major war or, in the event of war, of winning it. If it is sensible to build stand-by plants at the present time, it surely is sensible to invest in the citizens of this country so that they can be better soldiers if the need arises. But unlike the armament plants which will not be easily convertible to civilian use, there would be the clear gain of eliminating illiteracy among large numbers of young adults irrespective of whether the future holds peace or war.

From the viewpoint of public policy one general conclusion is unmistakable. If the United States wants to strengthen its military arm, if it desires to contribute to the heightened productivity of the economy, if it wants to buttress the foundations of American democracy, then it is incumbent upon the country to work for the eradication of illiteracy among the population. Its major attack must be directed toward the source which means the strengthening of elementary education, particularly in the poorer states. The corrective action further involves a constructive use of special training units within the Armed Services so that a large number of illiterate young adults can acquire a basic education. And finally, the effort calls for community action at every level to insure a maximum opportunity for those illiterates who cannot profit from a military program. The Federal Government has in this situation a big responsibility which it can start to discharge through the judicious use of funds and through the constructive use of the military. But the Federal Government cannot possibly do the job alone. It is the servant of the people, and the people must direct it. There are many other important resources available to the nation, all of which must be enlisted if the program is to succeed.

We stated at the beginning of this chapter that this study of the uneducated is but one facet of a more comprehensive investigation into the conservation of human resources. Now, in conclusion, it is well to call attention, at least in summary form, to certain findings of fact and theory that have emerged in this investigation that have a direct bearing upon the broader problem of how our human resource potential can be more effectively utilized. Our reading of American history led us to the conclusion that, except for a short period during World War II, our economy has not been able to make full use of all those who have wanted to work. We have been less plagued by a redundant population than most other countries, but the fact remains that there have usually been more workers available than work. Because of this fact, the country has not been particularly concerned about measures that could contribute to raising the competence of individual workers. Certainly we have felt little pressure to establish a maximal program directed toward the development of human resources.

We saw, however, that this country has engaged in the sub-

stantial expansion of the quantity and quality of public education over the past many decades. Occurring simultaneously with this expansion has been a marked change in the nation's occupational structure, typified by the striking shrinkage in the numbers who earn their livelihood on the farm and the rapid expansion of the members employed in industry and in the service trades. There has been an accommodation between these two developments with the result that modern industry has come to take for granted and rely upon a literate working population. The splendid isolation of the illiterate farmer of former years must now be contrasted with the difficulties that an illiterate migrant encounters in seeking a place for himself in a large-scale industrial organization. Increasingly, literacy is a prerequisite for industrial employment. The illiterate is truly the marginal man.

This investigation also helped to throw into sharper focus the difficulties of making sound progress speedily in social psychology and the allied social sciences, and, more particularly, in having the sound findings of these disciplines become the basis of public action. It is understandable why there was considerable confusion immediately after World War I about the results of the intelligence tests with respect to the mental characteristics of the American population. A considerable number of reputable scholars interpreted the findings to mean that certain large groups of particular racial or regional backgrounds were innately less intelligent than other sectors of the population. However, since the United States led the world in the refinement of intelligence testing in the 1920's and 1930's, it is surprising to discover the widespread misconception prevalent during World War II and still prevalent today both among experts and the public that the large numbers who failed the older and the present revised Armed Services tests were "mentally deficient." Undoubtedly, some who failed were truly mentally retarded. But both theory and fact indicate that most of those who fail have simply been deprived of reasonable educational and cultural opportunities. We may not know all that we should know about the difficult problem of mental deficiency, but we surely know enough to avoid repeating the errors of confusing the mentally deficient with the educationally deprived.

The explanation for our inability to make intelligent use of the

knowledge which we have acquired is probably imbedded in the nature of prejudice, several aspects of which have been illuminated in the course of this study. We noted that the Negro population, particularly that large part living in the rural South, has been characterized by a high rate of illiteracy. It is very easy for those who hold deep-seated feelings about the innate limitations of the Negro to jump to the conclusion that he and all other illiterates are inferior by nature, not through lack of opportunity. A major error made by those who hold to this position is their failure to recognize the tremendous efforts which have been taking place to raise the educational standards of the Negro population. They think of the Negro recruit of today in terms of the handy man whom they knew in the South at the turn of the century. Another illustration of the strength of preconceptions and prejudice is the way in which the military concluded that there was little point in trying to work with illiterate and poorly educated soldiers, since even after they had received special training they would still perform in an unsatisfactory manner. We saw that the military had some basis for reaching such a negative conclusion, but the more important finding was that their basis was inadequate and that they were unwilling to assess the problem objectively.

One of the most interesting themes that ran through the whole study was the assumption made by industry and the Armed Services alike that a certain level of educational background was not only desirable but was a necessary prerequisite for satisfactory performance. Closer study revealed that there was very little basis for most of these fixed opinions, and it surely did not follow that the more education a person had, the better he performed his work. This depended very clearly on the demands of the job and the range of his abilities. We did discover, however, the real difficulty of incorporating a relatively small number of illiterates into an organization that was structured on the assumption that the persons within it could read and write.

There is a thread which binds these several findings together. As a people we have been, until recently, little concerned with our human resources. Although we did not always have just the number of persons in each sex and specialty required for maximum progress—one need only recall the shortage of women and trained

men in the settling of the West—these were special rather than general deficiencies.

There runs throughout our history evidence of the conviction that a man should have access to education so that he could develop his potentialities to the full. We did much to establish and expand an educational system from kindergarten to professional training, supported by public funds and available to all. But we saw no special urgency to train our human resources potential as quickly and as completely as possible. With enough people available most of the time to meet most of the needs of agriculture and industry, the rate of progress in expanding our educational and training facilities appeared unimportant. To accelerate this process seemed questionable unless we were willing to break down the many barriers that still stood in the way of the full utilization of those who had already been trained, particularly women and members of minority groups.

Only recently have we seen the problem for what it is. In the struggle in which the United States and the other free nations are currently engaged to maintain their way of life, our strength lies in the quality of our human resources—in the competence, imagination and dedication of the population—not in sheer numbers. We can no longer ignore the wastage of our human resources which results either from our failure to develop all latent potentials to the full or our failure to utilize them fully after they have been developed. For the welfare and security of the United States, in fact of the free world, have come to depend upon granting every individual citizen the opportunity for the full development and utilization of his human potentialities.