

Chapter 1

The Role of Education in American Society: Expanding Opportunity and Persistent Inequality

A COLLEGE degree does not guarantee success. Nothing really does—there is too much happenstance in life to say what is best for every person. But if we had to choose one attribute that would carry greater weight than any other, it would be educational attainment. The economic fault line between high school and college graduates in the United States is wider than ever—college graduates have, on average, earnings 75 percent higher than those of high school graduates.¹ Higher education is also highly correlated with a lower probability of divorce, better health, and higher satisfaction with work and family life. These facts are not lost on young people. National surveys show that the overwhelming majority of high school students desire to attend and graduate from college.² The reality is, however, that most of these students will not achieve their dreams. At the end of formal schooling, only about one-third of young adults attain a bachelor’s degree.

The aim of this book is to explain the inequality in educational outcomes—college graduation, in particular—by three fundamental ascriptive characteristics: gender, race-ethnicity, and immigrant generation. Sociologists use the term *ascription* to refer to characteristics that are generally fixed at birth and rarely change over the life course. In a fair world, such “accidents of birth”—not subject to choice—should not limit how far one can go in life. The democratic theory of equality of opportunity suggests that all children should have the right and freedom to go as far as their abilities and efforts allow them. Despite widespread belief in the theory of equal opportunity, the reality is that ascription is highly correlated with what happens later in life.

Scholars and laypersons alike have ideas and hunches about the “real” reasons for the strong association between ascription and educational attainment. In the University of Washington-Beyond High School (UW-BHS) study, we attempted to empirically test the leading hypotheses for educational inequality between men and women, racial and ethnic groups, and immigrant generations. At the top of the list, for the last two categories, was the hypothesis that the social class or socioeconomic status (SES) of families in which students are reared explains much of the educational disparities by ascription. (In this work, we use the terms *social class* and *socioeconomic status* interchangeably.) Other questions pursued were the presumed role of socialization and the transmission of cultural influences by families, peers, and communities. We also explored the role of student employment, participation in extracurricular activities, and the characteristics of schools as mediators of educational inequality. Our aim was not to “explain away” the impact of ascriptive characteristics but to clarify why ascription continues to matter in schooling, which is generally considered one of the most meritocratic of all institutions.

Our focus was on access to and completion of higher education, that is, earning a bachelor’s degree (BA or BS). High school graduation remains a serious problem in American society. The conventional estimate of a 90 percent high school graduation rate is clearly inflated; most researchers put the figure at 70 to 75 percent.³ But increasingly, college is what matters. The majority of high school graduates—upwards of 65 to 70 percent—begin postsecondary schooling, but only half of those who enroll in college earn a bachelor’s degree. Successful completion of college largely depends on where you begin. Community colleges and vocational schools offer educational opportunities to many students, most of whom do not have opportunities to attend a traditional four-year college.⁴ However, the likelihood of completing college with a baccalaureate degree is more than five times higher for students who begin college in a four-year institution than for those who begin in a two-year institution.⁵

Our study was based on the assumption that college graduation is a process that extends from adolescence to the early years of adulthood. The process is illustrated with the metaphor that the path to college graduation is akin to grabbing on to a fast moving train that begins in high school. College graduation—reaching the final destination—is most likely for students who hang on to the train despite some fast turns and bumps along the way. Our conceptualization of this process is the College Pathways Model, which is described and explained in greater detail in chapter 4.

According to the model, most college graduates begin with high aspirations to complete college, have confidence that their aspirations will be realized, prepare for college while in high school, enroll in a four-year college right after high school, and persevere in completing college. Some students who fall off the college-bound train manage to climb back on,

but the odds are against it. We also include an analysis of those who pursue “alternative pathways” to college graduation. The College Pathways Model is a useful framework for analyzing how each step in the process contributes to disparities in college graduation rates by gender, race-ethnicity, and immigrant generation.

In chapters 1 and 2, we set the stage with an overview of the role of education in American society and recent trends in college graduation. In chapter 3, we explain the origins of the UW-BHS project and describe the data and methods used to conduct the research and interpret the results. The project was a longitudinal study of about ten thousand high school seniors from twelve high schools in the Pacific Northwest. Despite the geographical and temporal limits of these data, we suggest that the results speak to national issues and concerns.

Chapters 5 through 8 present the analyses of how socioeconomic origins, child rearing and culture, student employment and participation, and type of high school affect each stage of the College Pathways Model by gender, race-ethnicity, and immigrant generation. In chapter 9, we present a summary of the major findings of the study and their implications for the public debate over educational opportunity and persistence of inequality.

Why Education Matters

One of the dominant images of American history is the little red schoolhouse. The one-room building with students of all ages was a symbol of the nineteenth-century American value that formal schooling was a priority even in frontier communities. By 1840, perhaps as many as 40 percent of youths aged five to nineteen years were enrolled in some form of schooling in the United States.⁶ Mass education did not become common in most other countries until well into the twentieth century.

Education continues to be a priority, perhaps the number-one priority, in contemporary American society. But the one-room schoolhouse is long gone. Perhaps the modern equivalent might be a sprawling, suburban high school campus with multimedia classrooms, varied educational programs and counseling services, and expansive athletic fields. With half or more of high school students going to some sort of post-secondary schooling, the American landscape is dotted with institutions of higher education from small picturesque undergraduate colleges to mega-universities that enroll tens of thousands of students. Some universities have more students than the population of medium-sized cities. Even more numerous than traditional baccalaureate degree-granting colleges and universities are the thousands of community colleges, technical schools, and other institutions that lead to two-year (associate) degrees, certification, and vocational training.

The number of students, teachers, administrators, support staff, researchers, and related personnel involved in the American educational sector is staggering. In the fall of 2013, eighty-five million persons, more than one in four Americans, were either students or employees in an educational institution.⁷ The largest component of this number is the fifty-five million students enrolled in elementary or secondary schools. In addition, twenty-three million students are enrolled in postsecondary degree-granting institutions, and about ten million persons are teachers, faculty, or professional, administrative, and support staff employed by educational institutions. If we define educational services more broadly to include technical and trade colleges and other schools, thirteen million workers were employed in educational services in 2013—over 9 percent of the American workforce.⁸

There is also a huge monetary investment in schooling in the United States. The National Center for Education Statistics (NCES) reports that over one trillion dollars was spent on elementary, secondary, and tertiary (only degree-granting institutions) education in 2012—about 7 percent of the total U.S. gross domestic product (GDP).⁹ Direct general expenditures for public schooling constitute almost one-third of the budgets of all state and local governments in the United States.¹⁰

The value of education is even greater than the sum of its current expenditures. Schooling is literally an investment in the future. Although individuals pursue education for many reasons, including the love of learning, the dominant motive is to prepare for a remunerative and productive career. Indeed, attending school is virtually synonymous with growing up, and leaving school is generally associated with entering the workforce. Children are expected to enter the age-graded schooling system at age five (increasingly at age three or four) and are generally required to continue until age sixteen. Many persons continue to enroll in school well into their mid-twenties or later. The objectives of elementary and secondary schooling—literacy, numeracy, and basic knowledge of science, history, literature, and other fields—are considered to be essential skills for employment in the modern economy and for active citizenship in society.

The importance of education extends far beyond the provision of basic skills taught in primary and secondary schools. Colleges and universities train students in advanced knowledge and specialized skills in liberal arts, science, engineering, medicine, business management, and many other fields. The continuous production of new graduates is vital to the functioning and advancement of the many complex and technologically sophisticated sectors of the modern economy. With rapidly changing technology, universities equip students with the skills necessary to continue learning throughout their careers. Colleges and universities, however, do much more than transfer knowledge across generations; they also

produce new knowledge. Many, if not most, of the important technological innovations of recent years are based on research conducted at universities.¹¹

While it is still possible for creative individuals to produce new inventions in a “garage,” most contemporary discoveries and technological innovations are derived from basic scientific research, the corpus of knowledge produced by researchers in universities or by university-trained researchers in laboratories, industries, or government agencies. The huge investments in education, both individually and collectively, in American society are premised on the role of educational institutions in creating and transmitting knowledge across generations.

Economic historians estimate that the growth of human capital—the knowledge produced by schooling—accounts for at least 25 percent of economic growth, especially in modern developed countries.¹² Samuel Preston attributes most of the gains in world life expectancy from the 1930s to the 1960s to the increased knowledge that led to the understanding and control of disease.¹³ Although educational expenditures must compete with other national priorities, the widespread belief that schooling and basic research are investments for future well-being has contributed to the growth of the education sector in the United States. Public investment in education is also a response to the popular demand for schooling. Individuals may not be certain about the precise economic payoff, but they know that, in general, obtaining more education leads to better jobs, higher incomes, and more rewarding lives.

Research by social scientists strongly supports the conventional view that more schooling is the key predictor of individual socioeconomic attainment.¹⁴ The Census Bureau estimates that over the course of a forty-year career, a worker with a bachelor’s degree will earn a million dollars more than a high school graduate.¹⁵ The finding of a high economic rate of return to years of schooling is robust across a broad range of empirical studies.¹⁶

Human capital theory posits that the high correlation between educational attainment and income is causal: more years of schooling represent skills and knowledge that will lead to higher economic productivity that is rewarded directly (to entrepreneurs) or indirectly by firms that offer higher wages to workers who contribute to productivity. Another interpretation is that education is just a mechanism for the transmission of status, wealth, and power across generations. These are not mutually exclusive interpretations. Families do indeed seek to pass along socioeconomic advantages to their children, and providing educational opportunities is a means of doing so. The current evidence indicates that education plays a dual role; it is both a means of passing along high-status positions across generations and a channel for upward mobility for students from disadvantaged backgrounds.¹⁷

The benefits of schooling are not limited to labor-market returns. A 2011 review of the nonpecuniary benefits of schooling with data from the NORC at the University of Chicago General Social Survey found that persons with higher levels of schooling enjoy advantages in health, happiness, family stability, and a broad array of social and psychological outcomes.¹⁸ Not all of the associations between schooling and positive outcomes are causal; other factors may be the joint determinant of both. However, most of the positive effects of schooling held up in multivariate models with statistical controls for socioeconomic background and other covariates.

One of the strongest findings from recent research is that more highly educated people are healthier and live longer than persons with less schooling.¹⁹ In addition to a general association with SES and improved access to health care, education appears to be associated with a greater sense of control over behaviors and habits that contribute to health and longevity. Individuals with more education tend to smoke less, engage in fewer risky behaviors, experience less stress, exercise more, and have healthier diets.

Highly educated women were once less likely to marry, but this tendency has reversed in recent decades. Since 1970, women, both white and African American, with college degrees have become more likely to marry and less likely to divorce.²⁰ Cohabitation has become a normative feature of American family formation, but it is more prevalent among those with a high school diploma (or less) than among persons who have attended or graduated from college.²¹ These trends are accentuated by a growing social divide by educational attainment. Since 1970, college graduates have become much more likely to marry other college graduates than persons with lower educational attainments.²² These family-formation patterns have effects on the next generation. The children of less-educated parents are more likely to experience a parental divorce or have a parent with a cohabiting partner, or both.²³

In general, highly educated Americans also report higher levels of happiness, life satisfaction, and social and civic engagement.²⁴ The belief that these effects are “caused” by higher education is reinforced by evidence that persons whose backgrounds would not have predicted they would go to college experience the most positive effects of a college education.²⁵

Although the positive effects of education, collectively and individually, are interpreted as an American phenomenon, the lesson is increasingly universal. In recent years, the growth of enrollments in higher education in other countries has exceeded that of the United States. Understanding how this has happened requires a look backward to the history of schooling in the United States.

A Historical Perspective on American Schooling

With industrialization and political modernization transforming societies during the second half of the nineteenth and early twentieth centuries, the functions and structure of educational institutions also began to change. In modernizing societies, schools, generally financed by public authorities, began to assume some of the responsibilities of families by training children and adolescents for careers. The transformation of the occupational structure meant that children were less likely to follow the vocations of their parents, especially in agriculture. Workers needed to learn new skills of literacy and numeracy, as well as discipline and punctuality, to work in factories and other urban pursuits. Initially, schools in industrializing countries reflected the customs and prejudices of their feudal past. Schools were segregated by social class and mission. The schools for the children of workers and peasants were much more vocational than academic. There was relatively little emphasis on schools as channels of social mobility.²⁶

Gradually, the mission of education changed from reproducing inherited privilege among elites to sorting students by aptitude and achievement for roles in an increasingly complex economy.²⁷ These changes were most evident in the post–World War II era, as modern states assumed responsibility for managing their economies and insuring the social welfare of their populations. Modern industries needed highly skilled, flexible, and motivated workers. The role of schooling in modern societies was expanded to provide almost universal primary and secondary education and to give an increasing share of students the opportunity to go to college.

In their magisterial history of American schooling, Claudia Goldin and Lawrence Katz claim that the United States had a modern school system right from the start.²⁸ They identify three distinct periods in the expansion of American schooling: the spread of the common school in the nineteenth century, the “high school movement” in the early twentieth century, and the expansion of public universities and colleges in the early post–World War II era. Several distinctive organizational features radically differentiated American schooling from that of most other industrializing countries. The American tradition was typically a decentralized system of largely public, secular schools that were open to all, forgiving of failure, and gender neutral. These were not absolutes—there were many religious institutions; some schools were very elitist; and female students were not always welcome. But the overwhelming majority of students who attended common schools (one-room schools that emphasized primary education), flocked to secondary schools in the years before World

War II, and filled college classrooms in the 1950s and 1960s were participants in a mass educational experiment that had few, if any, precedents.

The non-elitist structure and culture of American education were quite unusual in the nineteenth and twentieth centuries. By its very nature, schooling creates a hierarchy based on competition among students, who are generally ranked by their performance. High-achieving students and their schools are often lauded while others are labeled as second- or third-rate. Educators and administrators tend to be drawn from the “winners” of educational competition, and they generally favor a system with a small number of students at the highest level that rewards people like themselves. The elitist model of education is also reinforced by cost considerations. It is very rare for the costs of schooling to be borne completely by students and their families. Even elite educational systems tend to be heavily subsidized, both directly through state revenues and indirectly through grants and tax exemptions.

As discussed earlier, education is an investment that leads to higher incomes among graduates and higher rates of economic growth for society. But these are long-term benefits, and in the short run, the costs of salaries (for teachers, administrators, and support staff) and the construction and maintenance of facilities (buildings, libraries, laboratories, stadiums) must be paid for with taxpayer funds. The total educational budget is less when educational opportunities are rationed within an elite system of schooling. The key attribute of elite educational systems is competitive exams that restrict enrollments to relatively small numbers in secondary schools and even fewer at the tertiary level.

A smaller educational system can generally afford to subsidize those at the higher rungs. For example, an elite higher-education system can be staffed with a small number of master teachers or senior professors, assisted by acolytes. There are also fewer demands for accountability or practicality in an elitist system of higher education. In fact, the content of classical elite schooling was generally focused on philosophical, literary, religious, and other abstract topics. The elitist character of national educational systems in most countries, including advanced European countries, persisted until fairly recent times, well into the twentieth century.

In contrast to the standard model of an elitist educational structure, the American educational system evolved with an inclusive democratic ethos. Goldin and Katz argue that the exceptionalism of American public schooling is largely due to decentralized states and localities, which taxed themselves to provide common schools in the nineteenth century and (nearly) universal high schools in the early decades of the twentieth century. Although there are some signs that the practical and economic values of schooling were motivating forces (such as the creation of the land-grant college system that emphasized agriculture in the 1860s), American secondary and tertiary schooling generally had an academic rather than

vocational curriculum. An interesting feature of American secondary schools is that enrollments were often higher in rural areas and smaller towns than in large industrial cities.

Broad-based support for American schools, based on local and state taxes, was reinforced with the openness to all youth. An elite educational system with high failure rates would probably not have generated popular support and public funding. The exclusion of African American students in the South (and Asian Americans in some West Coast localities) was a notable exception to the overall pattern of mass schooling that generally accepted women and newly arrived immigrant groups from Europe.

Mass schooling at the tertiary level is a more recent phenomenon in the United States. During much of the nineteenth century, only about 1 percent of college-age youth attended institutions of higher education, and the figure was still below 5 percent in the 1920s.²⁹ There was a group of elite colleges in the nineteenth century, primarily in the Northeast. In other regions, especially in the Midwest, most colleges displayed the features of openness that characterized American primary and secondary schools, with subsidized tuition, flexible schedules, and minimal entrance requirements.³⁰ Many colleges were church based, but the majority of college students attended public institutions. Teacher training and other practical pursuits, including agriculture, engineering, and business, became central missions of publicly funded colleges in the early twentieth century.³¹

The takeoff in college enrollment—the beginning of mass tertiary education—started in the late 1940s. In the mid-1940s, less than 10 percent of American men and 5 percent of women were college graduates.³² By the mid-1970s, a quarter of young men and one-fifth of young women were college graduates. College attendance rates were much higher, generally hovering around 50 percent.

A significant contributor to the jump in college enrollment in the late 1940s was the enrollment of more than two million veterans, many of them from working class origins, with benefits from the GI Bill.³³ The surge in college enrollment in the three decades after World War II was, however, much broader and systemic with the expansion of publicly funded state colleges and universities in the 1950s and 1960s. Goldin and Katz credit the creation of a mass secondary-school system during the first half the twentieth century with being an essential prerequisite for the expansion of college enrollments.³⁴ But perhaps more important was the growing role of scientific knowledge and training in a modern society and the quintessential American belief in the value of public education. President Harry Truman's Commission on Higher Education recommended dramatically expanding government support and scholarships for students to attend community colleges, liberal arts colleges, and graduate schools. In a prescient statement, the Commission reported that "higher education is an investment, not a cost" in a democratic society.³⁵ It also boldly called

for abolition of the restrictions and quotas that limited participation of African Americans and Jews in higher education.

The growth in college-student enrollment, as well the renown of American universities, in the post-World War II era, was primarily due to greater investment in public (state-supported) institutions. Before this point, the most highly reputed colleges in the United States were private institutions, and the elite private universities (the Ivy League, Johns Hopkins, and Stanford) were generally at the top of national rankings of prestige and quality. Over the course of the twentieth century and especially following World War II, public universities rose to the top. At present, 75 percent of all undergraduate students are enrolled in public institutions,³⁶ and the majority of major research universities are public institutions.³⁷

The rise of public colleges and universities can be most clearly understood by examining budgets. In 1949 the expenditures of all postsecondary degree-granting institutions in the United States was only 0.8 of 1 percent of the national GDP, a ratio that was unchanged from 1939 and barely higher than the 0.6 percent in 1929.³⁸ This figure rose dramatically to 2.3 percent of the GDP in 1975, during an era of robust economic growth. Although the budgets of college and universities continued to expand in absolute terms over the next few decades, the relative share of spending on higher education stagnated at 2.2 to 2.5 percent from the 1970s to the 1990s. The relative share of GDP spent on higher education did rise to over 3 percent by 2010.

The rise and subsequent slowdown of public investment in higher education were also evident in the affordability of attending a public university. Real tuition at public institutions was stable during the 1940s and 1950s and only rose modestly in the 1960s—averaging about \$1,100 (in constant 1982–1984 dollars) in 1970, or about 4 percent of median family income in that year.³⁹ From 1970 to the early 2000s, tuition at public institutions tripled in constant dollars and rose to almost 10 percent of median family income.⁴⁰ The major reason for rising tuition at public colleges and universities was the reduction of support from state governments.⁴¹

In addition to the slowdown of investment in public higher education and rising tuition levels, other potential reasons are mentioned in the research literature for the stagnation in college graduation rates since the 1970s. In addition to traditional factors that influenced the relative levels of college enrollment of men and women, public policy related to military benefits and the draft may have widened gender differences in higher education. For example, veterans who served during World War II and the Korean War received significant financial support to attend college. There was also a deferral of military service for college students before the creation of an all-volunteer force in 1973. These policies probably increased men's (relative to women's) college attendance during the 1950s and 1960s.

In their final chapter, which addresses the decline of American education in the late twentieth century, Goldin and Katz speculate that the virtues of American education—its decentralization and open, forgiving character—may have run their course and become impediments to improving educational quality and the preparation of students for post-secondary schooling.⁴² Decentralization and competition between states and localities worked well to finance universal primary and secondary schooling and to build public colleges and universities after World War II. However, decentralization made it difficult to formulate national policies to address systemic needs with federal funding. The openness and forgiving nature of American education allowed many points of access, including second chances to students to recover from early failure. The open-admissions policies of public universities may work reasonably well if most secondary schools prepare students for college-level work, but the emerging problem may be an increasing number of high school graduates who are very poorly prepared for college.

An assessment by William Bowen, Martin Kurzweil, and Eugene Tobin of the stagnation in college enrollment and graduation from the 1970s to the present is similar to that of Goldin and Katz.⁴³ They note that the slowdown in college growth varies by gender and race-ethnicity. White women (but not men) and Asian Americans have continued to increase their college attendance in recent decades. Bowen, Kurzweil, and Tobin conclude that public-sector disinvestment in the quality of high schools has left many disadvantaged American students, disproportionately racial and ethnic minorities, poorly prepared for college. The decentralized structure of public schools, which was once an asset to increasing public funding and access, now penalizes students who live in low-income areas with inferior schools.

In their 2009 work, William Bowen, Matthew Chingos, and Michael McPherson also emphasize the widening class divide in access to, and completion of, higher education.⁴⁴ Based on national longitudinal surveys of high school graduates in 1982 and 1992, Bowen and colleagues find stagnation or regression in college enrollment rates and college completion rates (of college entrants) of students in the lower-income quartile compared to students in the highest income quartile. Students in the middle-income quartiles are more likely to enroll in a four-year college but less likely to earn a degree.⁴⁵ The persistent and widening gaps in educational success by socioeconomic and minority status are rooted, at least in part, in the organization of higher education. Net of all background variables, students who attend flagship public universities (which are better funded, more prestigious, and have higher student academic profiles) are considerably more likely to earn a college degree than students who begin at other state (and community) colleges.

These organizational features of higher education, including the expansion of public universities in the 1950s and 1960s and the more recent rise

in costs, have conditioned trends and inequality in access by ascriptive characteristics. But most of the research has focused more on microlevel variables and family background.

Equal Educational Opportunity

The commitment to equal educational opportunity in modern societies provides an additional impetus for investment in educational expansion. James Coleman argues that the concepts of equal opportunity, and more specifically equal educational opportunity, only arise in modern democratic societies where individuals can imagine themselves as equal to others, that is, as “exchanging places with anyone else in the system.”⁴⁶ In traditional societies, there was little social mobility, and the function of schools was to impart the ideals of tradition and authority. In contrast, the expectation of social mobility has become part of the social and cultural fabric in modern societies. This democratic ethos is embodied in the popular belief that a child from a humble background can be just as likely as those from more privileged backgrounds to advance through the educational hierarchy and qualify for a higher status occupation. The underlying assumptions of the meritocratic model are that all children have equal access to schooling, that educational competition is based on ability and effort, and that educational credentials serve as a primary sorting mechanism in the competition for good jobs and rewarding careers.

The meritocratic model is an “ideal type” and not an accurate description of American (or any other) society. But so, too, is the image of the United States as a class-ridden society with education merely serving to reproduce the social hierarchy across generations. The reality seems to lie somewhere in between these abstract models. There is a fairly high degree of intergenerational “status maintenance,” with correlations between social origin (the socioeconomic standing of the family of origin) and occupational and economic destination of about .3 or .4.⁴⁷ A recent study of intergenerational economic mobility with direct measures of income (based on tax records) reported higher correlations of .52 for men and .47 for women between parental income and adult income of persons in their prime working years.⁴⁸

Even with some degree of uncertainty, it is important to see both sides of the coin. Parental SES does have a strong impact on a child’s occupational and economic attainments. But there is also considerable evidence of substantial intergenerational social mobility, primarily because of educational opportunity.⁴⁹ Education functions as the critical intervening variable between social origins and adult socioeconomic attainment. Families can bequeath positions and wealth, but most intergenerational advantages are conveyed indirectly through education. However, there is also a moderately high direct effect of education on occupation and income that is

independent of social origins.⁵⁰ This means that many individuals rise and fall in the socioeconomic ladder based on their “earned” educational attainment. As such, the degree of social mobility in the contemporary United States might be characterized as a constrained (or partial) meritocracy.

The Role of Models in Research on Educational Opportunity

Empirical research can serve to adjudicate between competing claims of fluid social mobility, based on a meritocracy or on an ossified social class structure, but only if there is a clear theoretical and testable model of stratification processes. Facts do not always speak for themselves because they can be expressed in a variety of ways to provide support for quite different interpretations. Expressed in statistical terms, outcomes (dependent variables) are often correlated with a number of potential causes (independent variables) that are correlated with one another. For example, many successful students who attend and graduate from college are ambitious, and their high expectations are considered a primary determinant of their educational attainment. But there is also a high correlation between socioeconomic origins and educational attainment. These findings provide support for rather different interpretations of the causes of unequal educational attainment.

The association between ambition and educational attainment is consistent with the meritocratic model, while the high correlation between parental status and offspring’s educational attainment could be interpreted as rigidity in the opportunity structure. The nub of the problem is that socioeconomic origins are correlated with educational aspirations—successful parents socialize their children to be ambitious. The interpretation of the shared explanatory power of competing independent variables depends on assumptions about causal priority. More data and more complex statistical methods might be useful, but techniques cannot substitute for a model that specifies how and why independent variables are correlated with each other and their presumed impact on the outcome to be explained.

Much of the research in the field of social stratification, including the UW-BHS study, is guided by the model of the socioeconomic life cycle formulated by Otis Dudley Duncan and his colleagues in the 1960s.⁵¹ According to the socioeconomic life-cycle model, causal priority among correlated background variables is assumed to follow the temporal order of events over the life course. Since children are exposed to parental influences before schooling, and education generally precedes work careers, the socioeconomic life-cycle model posits that educational attainment is endogenous to social (parental) origins, and that their shared variance (of social origins and education) in explaining occupational attainment is

due to the causal impact of social origins that is mediated by educational attainment. Thus, part of the impact of education is status maintenance (social immobility), and the remaining impact of education (net of social origins) represents social mobility or the role of education in loosening the ties between origins and destinations. The logic and method of estimating the effects of exogenous variables on outcomes via direct and indirect pathways is illustrated in Duane Alwin and Robert Hauser's classic 1975 exposition of the decomposition of effects in path analysis.⁵²

Despite the advances in research based on the socioeconomic life cycle, there are many ambiguous relationships in which temporal order or logic does not clearly imply a one-way causal order. For example, many ascriptive influences, such as the characteristics of the family of origin (race and ethnicity, SES, geographic residence, family structure, and others) have no clear causal priority. It is tempting to think that temporal order could be known with more detailed data, but such fine distinctions are rarely available. Moreover, temporal order assumes that events are more significant than processes. For example, the timing of parental divorce or separation may be intertwined as both a cause and consequence of economic problems. If causal order cannot be clearly established, the nature of a research question determines how variables are specified in a model and how the results are interpreted.

In this book, we address the impact of three ascriptive variables—gender, race-ethnicity, and immigrant generation—on educational outcomes. Considerable educational inequality exists along all three dimensions, and our objective is to explain these disparities in terms of their joint variation with other background variables. The first set of covariates is labeled “social origins,” which includes a large number of measures of SES and family background. There is no unambiguous causal order between the three ascriptive variables and social origins—they might be considered jointly determined. However, our research question asks to what extent educational disparities by race-ethnicity and immigrant generation could be a function of social origins if the latter is considered causally prior. The logic of this approach is well established in the research literature and will be discussed in more detail.

The more complex, and perhaps contentious, issue in our research design is how to address the relationship between ascriptive variables and the assumption of the meritocratic model, which posits that ability and effort are the primary determinants of educational attainments. Our goal of making assumptions explicit can best be clarified with a digression on various approaches in the prior research literature.

One of the most frequently debated issues is the role of measured ability (IQ) as a determinant of educational attainment. There is little disagreement over the question of whether “ability” (based on test scores) has a significant impact on academic achievement among individuals.

Virtually every study shows that test scores have a strong association with, and net direct effects on, all educational outcomes from high school to college. However, a number of related issues involve problematic measurements and dubious assumptions. The first issue is the heritability of ability (assumed to be measured by IQ tests), which is often extrapolated to even more contentious issues over the role of inherited IQ in intergenerational stratification. However, the most thorough and careful review of evidence concludes that the role of heredity in intergenerational stratification is relatively modest.⁵³

Individuals do differ in predispositions to learn, and some elements of these predispositions may be “hard wired” and heritable, just as potential athletic prowess may have an innate component. However, many varied predispositions influence student test scores. Just because we use one summary measure of academic achievement—grade point average (GPA) or test scores—does not imply an underlying single dimension.⁵⁴ Even if we assume that IQ is only one dimension, the correlation between the IQs of parents and those of their children cannot be assumed to be solely due to heritability. Nature (biological potentialities) interacts with experience and can even shape environmental influences. Tall children are more likely to be recruited (formally and informally) to play basketball. Active and inquiring infants can stimulate parents and caregivers to provide more nurturing learning environments. Since nature and nurture are interdependent in human development, all efforts to quantitatively apportion outcomes to one or the other are based on erroneous assumptions.⁵⁵

Several major flaws can also be found in the claim that the heritability of intelligence has a major role in intergenerational stratification. Not only is there a social feedback loop from nature to nurture, but advantaged parents do everything in their power to boost the potential learned skills of their children. This issue will be discussed at greater length later in this chapter, but the key point is that all measured tests of ability are strongly influenced by the motivation and resources of families. The recurrent claim that the heritability of intelligence is the major reason for the persistence of racial and socioeconomic inequality has been largely discredited in classic studies by Christopher Jencks et al., Claude Fischer et al., and Stephen Jay Gould.⁵⁶

A related flaw in the hereditarianism argument is the leap from the assumed intergenerational association between test scores at the individual level to a between-group interpretation. This leap is a logical fallacy. This may seem counterintuitive to laypersons unfamiliar with statistics, but an example might illustrate the issue. Most children of exceptionally gifted parents rarely inherit the same talents (athletic, intellectual, or artistic). At the same time, exceptionally talented individuals often arise from families of very modest circumstances. This pattern, “regression to the mean” (the random redistribution of many biological traits across

generations), loosens the individual-level correlations for many traits that are partially heritable. Since the correlations between social characteristics and biological traits are much looser to begin with, and they are mostly shaped by social patterns rather than heredity, it is virtually impossible to claim theoretical or empirical support for claims that heritable differences in abilities exist between groups defined by social class, race, religion, or national origin.

Our focus in this work is on the interpretation of measures of academic ability and cultural factors as potential explanations (our preferred phrase is *mediation variables*) of between-group (defined by gender, race-ethnicity, and immigrant generation) disparities in educational outcomes. In terms of statistical models, we make explicit our assumptions about the shared variance between background variables to explain educational outcomes. Our approach draws on prior research, including several generations of research from the “Wisconsin school” of educational stratification. One of the most famous articles in the Wisconsin tradition is the classic study of the relative impact of SES and measured intelligence on college plans, attendance, and graduation by sociologists William Sewell and Vimal Shah.⁵⁷ Their research was based on a longitudinal study of Wisconsin high school seniors in 1957, matched with school administrative records, including the Henmon-Nelson Test of Mental Maturity that was a widely used “intelligence” test at the time.⁵⁸

In order to have an impartial estimate of the effect of SES, independent of intelligence, Sewell and Shah analyzed the bivariate and net effects of SES on college graduation. Male high school seniors from the highest SES quartile were three to four times more likely to graduate from college than were students in the lowest SES quartile, holding constant measured intelligence. The SES advantages were even greater for female students. The findings were replicated in a multivariate path regression analysis.

Although Sewell and Shah are agnostic about the causal order of SES and measured intelligence (neither is assumed to be causally prior to the other), their analytical approach, in our judgment, underestimates the true impact of SES. Although a predisposition to learn (rooted in biological differences among individuals) undoubtedly has a strong impact on measured intelligence, we claim that there is no reason to assume that these dispositions differ at birth by parental SES. At a minimum, we claim there is no scientific evidence for biological differences in the ability to learn among newborns by SES. However, we have every reason to believe that differences in measured ability by SES emerge during infancy and childhood because of differential training and coaching of children in families of different SES.

Parents are strongly motivated to pass along socioeconomic advantages to their offspring. Some families can bequeath property and wealth to the children and also offer employment and rapid promotion in family

firms. However, most bequests are fairly modest, and few families own or control firms. Advantaged families can also promote the prospects of their children through marriage and contacts with well-to-do and influential persons in their social circle. This, however, is likely less common than it once was. Instead, the primary means of families in modern societies to advance the SES of their children is by providing them with opportunities for educational advancement. Education, especially in the form of a college degree, is the ticket to a better occupation and higher income. Colleges and universities can also serve as marriage markets and venues for making valued social contacts.

Given the central role of education in the American stratification system, many families, especially those who have benefited from education themselves, are highly motivated to do whatever it takes to prepare their children to succeed in school. Even before formal schooling begins, many parents and other relatives talk and read to children, seek out stimulating learning experiences, and buy educational toys to prepare children for preschool and kindergarten. Once children begin school, differences in resources and SES among families can lead to wide variations in resources and environments, such as private schools, additional tutoring, and the availability of books and computers at home. Children from disadvantaged families face deficits in each of these areas. As long as children are reared by families, there will not be full equality of educational opportunity. This claim is not based on the assumption of heritability of ability. Rather, it is grounded in the universal desire of parents to help their children and the differential resources among families.

Equality of educational opportunity is one of the most perplexing phrases in social-science terminology. For many, any inequality in educational outcomes (test scores, enrollment rates, attainment) is *prima facie* evidence of unequal opportunity. This may be a reasonable conclusion in highly stratified caste societies but not in modern industrial societies with universal public schools that are infused with the cultural ideal of meritocratic competition. Some degree of inequality of educational outcomes (the correlation between parental status and a child's education) may be inevitable in a democratic society composed of families with different resources and values. However, this does not imply that all of the actual inequality in educational outcomes is inevitable, socially desirable, and immutable to social change.

The technical question is whether ability (IQ) and cultural characteristics should be considered endogenous or exogenous in measuring the relationship between SES (and other ascriptive characteristics) and educational outcomes. The issue is often framed as differences between observed relationships and "true" effects. Controlling for as many variables as possible is assumed to allow for a better estimate of the true—more conservatively estimated—effect. This is correct if the additional variables

(that are held constant) are truly exogenous and represent confounding influences. Our argument is that measured ability and cultural characteristics should be considered endogenous between social origins and progress through schooling. The underlying assumption is that child-rearing and socialization are key mediators that can be measured through the attitudes, traits, and other attributes of adolescents as they pass through educational institutions.

These alternative approaches and assumptions can be illustrated with a reconsideration of the study by Sewell and Shah.⁵⁹ After controlling for IQ, they conclude that about half of the observed relationship between parental SES and college graduation is really due to inequality (unequal chances) and not due to richer people having “smarter” children. Our working assumption is that ability (innate predisposition to learn) varies across individuals, but the distribution of abilities at birth is roughly similar across all socioeconomic strata. The reason for the observed association between parental SES and measured IQ is that parents with higher SES coach their children to do well in school and on tests. Accordingly, our “revised” interpretation of Sewell and Shah’s results is that half of the effect of parental SES on college graduation is mediated by family influences, child-rearing, and other experiences that allow youth of higher SES origins to compete more effectively in schools. The other half of the effect of parental SES on college graduation is direct, which means that it must be explained by other advantages that are not measured by variables in the study. This approach is consistent with subsequent (and more comprehensive) models of educational stratification from the Wisconsin school that posited both test scores and GPA as endogenous to parental SES and other measures of ascription.⁶⁰

Our objective is to understand the reasons for disparities in educational outcomes. We begin by describing the observed differences in outcomes by ascribed characteristics. These are “social facts” that can be measured with simple bivariate statistics. We then seek to account for these differences in terms of other characteristics, such as family background, child-rearing practices, social influences, and student attributes. The objective is not to “explain away” disparities but rather to identify the factors that “explain why” the observed disparities exist. Our tools are multivariate statistical analyses informed by explicit models that posit how and why groups differ in their educational outcomes because of socioeconomic background, socialization, and other early life-course experiences.

In other words, our objective is to describe and explain educational disparities by three ascriptive dimensions: gender, race-ethnicity, and immigrant generation. Noticeably absent from this list is “social origins” (SES and other attributes of family background). Family SES is, of course, an ascriptive characteristic, but we argue that socioeconomic origin is the underlying factor that potentially explains other forms of inequality. To be

specific, “testing the SES hypothesis”—that is, determining whether family SES can account for other forms of ascriptive inequality—will be the first order of business in each of our multivariate analyses of educational attainment. As discussed earlier, we can make an obvious and compelling argument that SES contributes to educational attainment. Families with more resources are better able to prepare their children for schooling and to subsidize the costs of higher-quality schooling than poorer families.

Hypotheses of Gender Inequality in Education

Historically, the differences in educational attainment between men and women were considered unremarkable—they were relatively modest in magnitude and thought to be explicable in terms of gender differences in career orientations. In general, women received higher grades in high school and were more likely to graduate from high school than men, but were less likely to enroll in and graduate from college.⁶¹ Interestingly, the male-female gap in college attendance and graduation widened in the middle decades of the twentieth century as opportunities for higher education grew. The lack of females in higher education was typically explained (“rationalized”) in a variety of ways—differential gender socialization, lower returns to college education, highly feminized occupations not requiring a college degree, and differential family formation patterns (younger age at marriage and child-rearing obligations for women). These interpretations are not unrelated to discrimination against women. Many male employers and male-dominated institutions may have preferred to hire and promote men rather than women; cultural beliefs often stressed marriage prospects over careers for women; and many women may have set educational expectations lower than their abilities warranted.

From the 1960s to the 1980s, trends in gender relations began to change. Expectations of lifelong marriage began to wane, tolerance of extramarital sexual relations grew, and prevalence of cohabitation began to rise. These societal trends—often collectively called the second demographic revolution—changed the career orientations of young women.⁶² A couple of generations ago, about half of young women reported their only career goal was to be a wife and mother. Among cohorts coming of age in the 1980s, the goal of being a homemaker had all but disappeared, and women’s career aspirations were becoming more like those of men.⁶³ By the turn of the twenty-first century, roughly 80 percent of twelfth-grade females expected to graduate from college. The ambitions of men have also changed, but the gender gap has been turned upside down. In the 1970s women were less likely to expect to graduate from college than men, but after 1990 women were ten percentage points more likely to have this expectation.⁶⁴

Since parents do not (generally) choose the sex of their children, the distribution of social (family) origins of men and women are the same. The implication is that the standard models of social stratification, including family background covariates in multivariate statistical equations, has little relevance for explaining gender inequality in educational attainment. If differences exist in parental support for daughters and sons by social origins, however, compositional changes may be relevant for explaining trends in gender inequality in educational attainment.

Hypotheses of Race-Ethnicity and Immigrant-Generation Inequality in Education

In contrast to the narrowing and reversal of the gender gap in higher education, disparities in college attendance and graduation by race and ethnicity have been resistant to change. African American, American Indian, and Hispanic youth are much less likely to enroll in and graduate from college than are white youth.⁶⁵ However, not all racial and ethnic minorities are educationally disadvantaged. Asian American students are more likely to attend college than any other group, and many new immigrants (and the children of immigrants) have above-average levels of educational enrollment and achievement.⁶⁶ In this book, we seek to understand the sources of racial and ethnic disparities in higher education.

Two standard sociological hypotheses have been proposed to “explain” racial and ethnic differences in educational attainment in American society. The first is that racial and ethnic differences are simply a function of SES or social class. Under this interpretation—the social-class hypothesis—race and ethnicity are correlated with educational outcomes, but the “real” cause is socioeconomic differences between racial and ethnic minorities and the majority white population. Minority youth are disadvantaged because they are more likely to be reared in families with fewer resources (such as books, computers, and educational toys) and learning opportunities (travel, educational programs) to prepare them for formal schooling. Other dimensions associated with poorer home environments are unstable family structure and less-educated parents. Children reared in stable, two-parent families and with highly educated parents are much more likely to do well in school and pursue higher education. Low income and family instability often translate into a social and cultural environment that deemphasizes long-term investment and deferred gratification. The social-class hypothesis also links poorer families with poorer neighborhoods, lower-quality schools, and negative peer-group influences that discourage schooling and upward mobility. Testing the social-class hypothesis was one of the primary objectives of the UW-BHS study (see chapter 5).

The second interpretation—the cultural hypothesis—posits that ambition and motivation can be transmitted through intergenerational socialization, irrespective of social class. While the social-class hypothesis considers socialization and cultural traits as important mediating variables that are endogenous to economic and environmental conditions, the cultural hypothesis suggests that some groups are able to sponsor the educational attainment of their children despite having fewer socioeconomic resources.

The cultural hypothesis is particularly important in understanding the educational attainment of the children of immigrants—popularly known as the second generation. During the first half of the twentieth century, second-generation immigrants in northern cities made remarkable progress in leap-frogging over the educational levels of African Americans and then approaching and often surpassing those of the long-resident (native born of native parentage, or third generation and higher) whites.⁶⁷ The educational gains of the second-generation immigrants—primarily from southern and eastern Europe—were due in part to the selectivity and economic progress of their immigrant parents, but also to the positive educational climate in northeastern and midwestern cities.

A more recent version of the cultural hypothesis is the immigrant-optimism hypothesis.⁶⁸ Immigrant optimism refers to the “selective” traits of determination and persistence among immigrants and their belief that hard work will eventually pay off in American society. Immigrant parents often work long hours in small businesses or in menial jobs with relatively low pay and opportunities for advancement. These conditions are accepted by immigrant parents as a necessary sacrifice in order to support their children’s education and chances for success. A considerable body of research supports this interpretation, with studies showing that the children of immigrants do better educationally than would be expected on the basis of their socioeconomic origins.⁶⁹ This boost—the immigrant-optimism effect—is hypothesized to be a response to parental and community pressures to succeed. The children of immigrants are often reminded, in verbal admonitions as well as by observing the sacrifices of their parents, that they must do well in school to climb the economic ladder.

Another version of the cultural hypothesis posits that the overrepresentation of some immigrant communities in small businesses promotes the social mobility of the second generation. This interpretation, which originated as the middleman-minority hypothesis, posits that some immigrant groups avoid employer discrimination by opening small businesses.⁷⁰ Ethnic enterprises also often serve the special needs of recent immigrants by providing or assisting in the search for housing, food, and services. But ethnic enterprises often expand to the general economy by offering popular goods and services at very competitive prices, as with

ethnic restaurants, Hispanic lawn-care services, Korean greengrocers, and Asian nail salons. In addition to the economic resources made available by running a family business, entrepreneurial experiences may reinforce cultural traits of rationality, frugality, and long-term investment that are rewarded in schooling. The entrepreneurial families who run or work in ethnic enterprises are hypothesized to be highly motivated to sponsor the educational attainment of their children.⁷¹ The effects of ethnic businesses may also spill over to youths in the broader community through employment opportunities, philanthropy, and providing a template for economic success.⁷²

Quite a different cultural interpretation is sometimes invoked to explain the lower educational outcomes of disadvantaged minorities. Although SES and family-background variables explain a share of the educational deficit among African Americans, American Indians, and Latinos, some of the residual gap is often attributed to cultural factors passed along through socialization and child-rearing patterns. The most prominent interpretation of the lower educational attainments of African Americans is the oppositional-culture theory of John Ogbu and colleagues.⁷³ The theory of oppositional culture holds that expectations of discrimination and the lower returns on investment in education experienced by blacks (and other disadvantaged minorities) have led to a rejection of schooling as a means of upward mobility. The most vivid expression of this theory is the disparagement of studying and doing homework by minorities because these activities are seen as “acting white.”

Although oppositional-culture theory is supported by some ethnographic accounts, almost every empirical study, quantitative and qualitative, has refuted its major predictions.⁷⁴ Black students are generally more optimistic about their future and express more proschooling attitudes than white students. There remains, however, considerable discussion about the gap between schooling attitudes and behaviors among disadvantaged minorities. Roslyn Mickelson offers the interpretation that many African American students hold abstract positive attitudes about the importance of education but are less likely to follow up with concrete attitudes and behaviors, including doing assignments and preparing for exams.⁷⁵ In an insightful survey of the literature on oppositional culture, Douglas Downey claims that the positive attitudes of black students are predictive of success at the individual level, but that environmental influences of poor schools and neighborhoods overwhelm their positive attitudes.⁷⁶

The leading sociological theory of racial and ethnic inequality in educational attainment is segmented assimilation, which blends both the social-class and cultural hypotheses with a particular focus on second-generation immigrants. Originally sketched in a brief article by Alejandro Portes and Min Zhou,⁷⁷ segmented assimilation theory has been revised and expanded by Portes and Rubén Rumbaut in successive editions

of *Immigrant America* and in *Legacies: The Story of the Immigrant Second Generation*.⁷⁸ Segmented assimilation has become the major theoretical orientation in the literature, but it has also been challenged by many researchers.

The major premise of segmented assimilation theory is that the standard sociological theory of assimilation—continuous upward mobility across immigration generations—does not account for the varied experiences of diverse racial and ethnic groups in America in the late twentieth and early twenty-first centuries. By calling attention to the diversity (segments) of trends and patterns, segmented assimilation provides a clear contrast to the “one size fits all” assumption of classical assimilation theory.

Social-science researchers debate the claim that classical assimilation theory assumed a linear path of upward mobility for all groups. With the exception of Robert Park’s 1950 prediction of eventual assimilation in his proposed race-relations cycle (contact, competition, accommodation, and assimilation), most research following the classic assimilation paradigm did not expect to find a linear “straight line” path of upward mobility for all groups.⁷⁹ Even Park, sometimes considered the originator of assimilation theory, noted that segregation and unequal power relations (forms of accommodation) prevented African Americans from entering the mainstream of American society. Milton Gordon’s *Assimilation in American Life* (1964) is considered a classic statement of standard assimilation theory, but his primary contribution was to distinguish the many dimensions of the concept; he rejected the notion of a monolithic process of assimilation. His characterization of American society, circa 1960, pointed to “ethclasses,” which meant that the major racial, ethnic, and religious groups were not structurally assimilated. By *structure*, Gordon meant primary group affiliations, such as families, neighborhoods, clubs, and cliques.⁸⁰

Although most often contrasted with assimilation theory, segmented assimilation is also a challenge to the theory that white racism is an unchangeable feature of American society, inevitably blocking opportunities for racial minorities. There are many branches of racial theory, contingent on time, place, and specific minority groups, but a common theme is that prejudice and discrimination persist because the pervasive ideology of white supremacy provides economic, social, and psychological advantages to the white majority.⁸¹ In rejecting the “one size fits all” model, segmented assimilation theory predicts alternative outcomes depending on the characteristics of different groups, social and economic institutions, and historical and social context. Moreover, the key dependent variable in most tests of segmented assimilation theory has been educational outcomes, a much narrower focus than the exclusionary economic and political arenas examined by more general racial theory.

In their segmented-assimilation model, Portes and Rumbaut present three pathways, or ideal types, of intergenerational adaptation by

immigrant groups.⁸² The first type, consonant acculturation, is similar to classic assimilation. This model argues that complete integration occurs within three generations in immigrant communities that possess high levels of human capital, have strong family structures, and receive a positive reception from American institutions. Members of these groups enter American society as college graduates and professionals and settle in middle-class suburban areas. They may experience some discrimination, but strong family structure and economic resources allow for relatively smooth patterns of acculturation and upward mobility.

The second pathway, dissonant acculturation, eventuates in downward assimilation into menial jobs and possible reactive ethnicity (militant ethnic identification created by discrimination). This outcome is a common finding in many empirical studies, but it is a central element of segmented assimilation theory—predicting that not all groups are equally likely to experience upward mobility in American society.⁸³ Groups that are particularly prone to dissonant acculturation are those with low levels of human capital, little knowledge of English, and weak coethnic communities that have an absence of professionals and entrepreneurs. Dissonant acculturation is also a likely outcome for groups that receive a hostile or negative reception from American institutions. The dissonant acculturation experienced by the second generation leads to failure in American schools, troubled intergenerational relations (little respect for working-class parents who do not know English), and a propensity to join gangs engaged in deviant behavior. One frequently mentioned finding among youth experiencing dissonant acculturation is a lack of fluency in their mother tongue as well as English. Lack of native-tongue fluency limits family communication and cohesion, and poor English leads to school failure and poor employment prospects.

The most interesting pathway in the segmented-assimilation model is the third—selective acculturation. This pathway partially resembles that of dissonant acculturation in its composition—namely, working-class immigrants with low levels of human capital. The primary difference is that selective acculturation is possible with strong families and cohesive ethnic communities that provide protection from the discrimination and the lack of receptivity from American institutions. Strong coethnic institutions, such as ethnic-enclave businesses, religious institutions, and voluntary organizations, provide positive images and opportunities that can compensate for the lack of economic resources. Children in these communities are encouraged to selectively acculturate—that is, to pursue upward mobility through schooling and mainstream institutions but not to adopt American adolescent culture. Those who selectively acculturate are encouraged to adhere to traditional values of family, culture, and language. If successful, selectively acculturated youth become bilingual, and this serves to reinforce family solidarity and educational advancement.

Segmented assimilation theory predicts integration and upward mobility, along with bilingualism, for those who selectively acculturate.

Segmented assimilation theory does not present a simple model for empirical research. Cases, which combine several characteristics (values on variables), are the primary units in the theory. The theory is easier to interpret with representative national-origin groups that easily fit the theoretical cases of consonant, dissonant, and selective acculturation. This approach is illustrated in the second chapter of Portes and Rumbaut's *Immigrant America*, which demonstrates how national-origin groups are often closely identified by human capital and legal status.⁸⁴ Professional and entrepreneurial communities generally have high human capital and enter the United States as legal immigrants. They encounter a neutral or positive reception, as do refugee groups that receive support from the government and community groups. Examples of such groups are Cubans, Vietnamese, Russians, Iranians, Chinese, and some South American and South Asian professionals. These ethnic communities are considered to be cases of consonant or selective acculturation. At the other end are working-class communities with an unauthorized (undocumented) legal status in the United States, such as Mexicans, Haitians, and some Central American groups—for example Salvadorans and Guatemalans. The children from these groups are considered the most at risk of dissonant acculturation. This short summary does not do justice to the nuances and qualifications of Portes and Rumbaut's text, which considers multiple legal statuses and the timing of arrival within national-origin groups.

The conventional approach to testing the predictions of segmented assimilation theory is to analyze the educational success and other early life-course outcomes of the second-generation national-origin groups.⁸⁵ National-origin groups are identified as consistent with the predictions of consonant, dissonant, and selective acculturation based on criteria such as parental human capital, occupational profiles, family structure, and bilingualism. Empirical analyses are invariably messier and more complicated than pristine conceptual models, but the results are generally in line with the theory. Cubans and East Asians do relatively well in school, in part because of their measured background variables (high parental human capital, for example) and also, some researchers argue, because of unmeasured characteristics, such as a favorable reception in the host society and strong family solidarity. Mexican American and other immigrant communities do not perform as well because of their low levels of family SES, weak coethnic communities, and a negative, often hostile reception (discrimination).

A central theme of the criticism of segmented assimilation is the theory's inability to sufficiently account for temporal changes in the progress of immigrants and the second generation. Joel Perlmann and Roger Waldinger note that the children of immigrants from southern and eastern

Europe in the early twentieth century eventually did climb the educational, economic, and social ladders in American society, but that it was a very long and arduous process.⁸⁶ Segmented assimilation theory posits that the darker skins of many contemporary (post-1965) immigrants and the new economy with few stable, well-paying, working-class careers have raised the risks for dissonant acculturation. But Perlmann and Waldinger observe that many early twentieth-century immigrants were not considered white and that they encountered poorly paid, unstable employment in nonunionized and very dangerous workplaces. The second generation of Italian, Greek, and eastern European immigrants initially experienced high dropout rates and low rates of social mobility. Stanley Lieberson finds that there was gradual progress in residential integration, occupational patterns, and educational attainment of the second-generation immigrants in northern cities from 1910 to 1940.⁸⁷ The incremental changes over time and across generations are not emphasized in segmented assimilation theory.

Richard Alba and Victor Nee conclude that the classical sociological-assimilation perspective best describes and explains the long-term trajectory of race and ethnic groups in American society, and of the descendants of immigrants in particular.⁸⁸ They argue that segmented assimilation theory is about variations in the process—temporal and national-origin differences, which are evident at any moment but not fundamental to the long-term historical pattern. Alba and Nee are most convincing in their revisionist account of the progress of the descendants of southern and eastern European immigrants during the first half the twentieth century. Despite the claims by many leading scholars in the 1960s and 1970s that the “melting pot never happened,”⁸⁹ Alba and Nee conclude that the majority of all white ethnics moved up the socioeconomic ladder, achieved residential integration in suburban areas, and even intermarried across religious lines at surprisingly high rates.⁹⁰

In his more recent volume, *Blurring the Color Line*, Alba presents a broader interpretation of how New Deal policies, the unifying experience of World War II, the expansion of higher education in the 1950s and 1960s, and suburbanization allowed American society to become more inclusive of white ethnics, primarily the children and grandchildren of Catholic and Jewish immigrants.⁹¹ The one exception to the master trend of assimilation is the historical experience of African Americans.⁹² If the integration and socioeconomic mobility of white immigrants can be measured in generations, the progress of black Americans, whose presence in the United States predates the arrival of almost all the ancestors of white Americans, is only evident in glacial terms. Indeed, the upward mobility of white ethnics occurred when there was a hardening of racial lines and widening of residential segregation from 1910 to 1960.⁹³

There is considerable agreement, however, between the proponents and critics of segmented assimilation theory on many of the “facts” regarding post-1965 immigrants and their children, as highlighted in a 2011 issue of *Social Forces*. An overview of segmented assimilation theory, including a response to its critics and new empirical analyses, is presented by William Haller, Alejandro Portes, and Scott Lynch, followed by comments from Richard Alba, Philip Kasinitz, and Mary Waters and then a reply by the original authors.⁹⁴ This exchange is stimulated, at least in part, by the book *Inheriting the City: The Children of Immigrants Come of Age* by Kasinitz et al., which is considered to be an empirical, if not a theoretical, challenge to segmented assimilation theory.⁹⁵ Kasinitz and his coauthors find, to their surprise, that second-generation immigrants in New York City had higher educational attainment and better career prospects than domestic minority youth—African Americans and Puerto Ricans.⁹⁶

The exchange in *Social Forces* highlights broad areas of agreement on many empirical issues, including:

- Almost all second-generation immigrants are fluent in English and have acculturated to American society.
- The children of immigrants with favorable social origins (high levels of human capital) have above-average educational and occupational attainments that are comparable to those of native-born white Americans.
- Family structure, including coresidence in early adulthood with parents, has a significant influence on socioeconomic mobility of the second generation.
- Significant minorities of second-generation youth lag behind their peers.

In other words, proponents and critics of segmented assimilation theory agree on the positive outcomes of the second-generation groups identified by consonant and selective acculturation in the theory. Critics may question the need for a new theoretical perspective, but there is little disagreement on these empirical findings. The major empirical disagreement is focused on the scope and patterns of the dissonant acculturation group with low human capital, weaker family and community cohesion, and a negative reception by American institutions.

In several studies based on the data from their Children of Immigrants Longitudinal Study (CILS), Portes and colleagues found that Central American, Haitian, West Indian, and especially Mexican second-generation youth are much more likely to experience downward assimilation in terms of high school dropout rates, poverty, unemployment, early fertility, and

encounters with the criminal justice system.⁹⁷ Controlling for family background, researchers find that some of these disadvantages are due to selectivity (human capital and family structure), but the remaining negative direct effects indicate the cause as negative reception of these groups, including but not limited to discrimination.

Some of the differences in findings and interpretations between proponents and critics of segmented assimilation theory may be due to differences in populations (for example, Mexicans are not included in Kasinitz et al.), study design (cross-sectional versus longitudinal), data sources, and dependent variables. But differences are also apparent in empirical results. Kasinitz et al. and Charles Hirschman find that West Indians are not below average in educational outcomes; however, the same authors find the situation of second-generation Dominicans (Kasinitz et al.) and young immigrants from the Hispanic Caribbean (Hirschman) are consistent with segmented assimilation theory.⁹⁸

Michael White and Jennifer Glick analyze inequality by immigrant generation (adolescent-arrival, 1.5, second, third) over various dimensions, including educational tests and attainment with national longitudinal surveys conducted by the NCES.⁹⁹ Without controls for family background, first- and second-generation immigrants have lower educational attainments than third-and-higher-generation (native born of native parentage) Americans. The lower attainments of first- and second-generation immigrants are largely due to “social class”—lower socioeconomic origins. However, once socioeconomic background is included as a covariate, immigrant generation is much less likely to be a major predictor of educational attainment. In fact, the second and 1.5 generations perform better in math tests and in college completion.¹⁰⁰ These findings provide support for the hypothesis of second-generation advantage rather than for segmented assimilation theory. However, as noted, we see less of a contest between these perspectives than do some of the protagonists.

An overall second-generation advantage, however, does not negate the findings that some groups are downwardly mobile, in accordance with segmented assimilation theory. For example, in their multivariate models, White and Glick find a significant negative net effect of Mexican ethnicity on educational outcomes, a finding that could be interpreted as evidence for the dissonant acculturation prediction of segmented assimilation theory.¹⁰¹

Key Assumptions of Models and Measurement

Our goal in this work is to describe and explain educational disparities by gender, race-ethnicity, and immigrant generation. Our analytical approach is to consider these three variables as exogenous, or “primary,”

and then to test whether, and how much, educational inequality in these dimensions is mediated by other student characteristics that are posited to be endogenous. The selection of these three characteristics of family of origin as exogenous may appear to be arbitrary—almost all attributes of family background are “prior” to the life of the student, and their temporal order is unknown and probably unknowable. However, the logic of our analysis depends on specifying precise questions with explicit assumptions.

The first assumption is that gender, race-ethnicity, and immigrant generation do not directly influence educational outcomes. Significant educational disparities by these variables may be evident, however, because of their association with other background variables that do directly affect educational outcomes, such as SES and other structural attributes of the family of origin. Gender, race-ethnicity, and immigrant generation may also be associated with education outcomes because of their indirect influence via proximate influences on student behaviors, attitudes, and roles. The key factors that might directly affect educational outcomes are socialization from family and friends, primary group associations, student employment and participation in school activities, and the qualities of schools attended. In this introductory chapter, we present an overview of the logic of this approach, with the full explanation and details presented in the subsequent chapters.

As already noted, inequality in family SES is the major reason for the lack of educational opportunity in the United States. In the abstract, all families want the best for their children, but they differ in their abilities and resources. Children from advantaged families are more likely to be coached and trained to do well in school, have access to better neighborhoods and schools, and have social networks that reinforce educational attainment. The higher test scores, school grades, and educational achievements of children from advantaged families are not evidence of superior innate abilities but of the greater social and economic investments made by their families. All theories of educational inequality, regardless of their peculiar emphases, stress the centrality of the social class, or SES, of families of origin.

Testing the social-class hypothesis in educational outcomes by race-ethnicity and immigrant generation is the subject of chapter 5. Since the sex of children is randomly distributed among families, SES has a different meaning for explaining gender differences in educational outcomes. Although the logic of the social-class hypothesis is fairly straightforward, the identification and measurement of socioeconomic characteristics are not. The term *social class* implies a conceptual framework with a few discrete categories that are hierarchically ranked with clear and substantial differences between groups but internally homogenous. In contrast, the term *socioeconomic status* suggests a graduated, but continuous, hierarchical

scale. Our use of these two terms interchangeably in this work captures the inequality of educational attainment that is caused by the differential statuses and resources among families of origin.

Our preliminary efforts to create a parsimonious SES index were stymied by a variety of technical issues, including missing data across a number of dimensions. Our preliminary research revealed that every summary index was inferior to the inclusion of the combined explanatory power (and mediating role) of all measured dimensions of SES and family structure. Since our objective was not to resolve conflicting theoretical claims about different SES concepts and measures, we adopted the pragmatic strategy to include all family-background variables that had a strong impact on educational outcomes and on educational inequality by race-ethnicity and immigrant generation. They are: father's educational attainment, mother's educational attainment, father's employment, mother's employment, father's occupational status (for respondents with a father or father figure in the labor force), mother's occupational status (for respondents with a mother or mother figure in the labor force), home ownership, and family status (intact or not).

In addition to SES and family background, two other intervening variables are considered in chapter 5: encouragement and GPA. Prior research has identified the influence of significant others ("significant-other influences," or SOI) and academic performance as the primary mechanisms through which social class works.¹⁰²

As noted earlier, the ascriptive variables of gender, race-ethnicity, and immigrant generation have been hypothesized to influence educational outcomes through cultural factors that are independent of family SES. To address this broad question, in chapter 6 we formulate a tentative model of specific cultural traits and test whether and how educational disparities by gender, race-ethnicity, and immigrant generation are mediated by cultural mechanisms beyond those influenced by SES and family background. The variables of encouragement and student performance (GPA), introduced as mediators of SES in chapter 5, are reconceptualized in chapter 6 within a broader rubric of cultural context, cultural orientations, and cultural expressions. The goal is not to explore all aspects of the relationship between culture and schooling but to test hypotheses that cultural influences and patterns mediate some fraction of the observed relationships between our three ascriptive variables and educational outcomes.

A Brief Recap

In the empirical analysis of the UW-BHS study, we survey the sources, mechanisms, and influences on disparities in college graduation by gender, race-ethnicity, and immigrant generation. We seek to understand the reasons for the below-average rates of college graduation of disadvantaged

minorities as well as the above-average educational attainment of other groups, including females and Asian Americans.¹⁰³ Immigration status is closely intertwined with race and ethnicity in American society. The children of immigrants, generally considered to be at high risk because of low SES, have done surprisingly well in the American educational system.¹⁰⁴ The recent evidence of higher rates of college graduation of women relative to men has become a central issue for research on educational stratification.¹⁰⁵

Our analysis is guided by ideas and hypotheses put forth earlier in this chapter. All theories of ascriptive inequality posit that the role of class or family SES is an important determinant of schooling, especially of higher education. The potential of family socioeconomic origins as a major variable in racial-ethnic and immigrant-generation inequality in college graduation is a key hypothesis.

We also examine alternative explanations, which state that family and community socialization may serve as mediating variables of SES and may also have direct independent influences. For example, Grace Kao and Marta Tienda posit in their immigrant-optimism hypothesis that immigrants pass along their high expectations and work ethic to their children.¹⁰⁶ James Coleman claims that some immigrant groups create high levels of social capital because neighbors and relatives monitor the activities of youths in order to reinforce the values of parents.¹⁰⁷ Portes and Rumbaut offer segmented assimilation as a theoretical framework that incorporates a broad array of factors (family SES, community resources, reception by the host community, and family communication) to explain why some second- and 1.5-generation immigrant groups do better than others.¹⁰⁸

We posit that social background affects college background and influences educational outcomes through five stages of the educational ladder, beginning with aspiring to graduate from college and culminating in completing college within seven years after high school graduation.

First we examine what contributes to one's aspiration to graduate from college. Aspirations to attend and graduate from college are often considered the major determinant of educational attainment. We then ask what factors allow vague aspirations to be solidified into concrete expectations to graduate from college. Some research has suggested that underachieving groups have high hopes for college but lack realistic expectations that help them follow through on their aspirations. Next, we examine how students' college expectations affect their preparations for college while in high school. College preparation is measured by taking college preparatory courses, taking college entrance exams (SAT or ACT), and applying for college. The next step on the ladder is college enrollment, particularly in a four-year college, and we analyze why many ambitious and college-prepared students do not make the leap to college enrollment. Finally, we look at the factors affecting the completion of

college by college entrants, given that only half of those who begin college eventually earn a BA or BS degree. The overwhelming majority of college graduates follow this sequence, so understanding which transitions are more consequential and which may vary across groups is a useful analytical framework. Of course, some students earn a college degree through an alternative pathway (second chances after deviating from the linear pathway), so we measure this process as well.

Our analysis is largely based on data from the UW-BHS project, which surveyed almost ten thousand high school seniors in nine public high schools and three private high schools in the Pacific Northwest from 2000 to 2005. In addition to the baseline senior survey (a “paper and pencil” questionnaire) we also conducted a one-year follow-up telephone survey, with a 90-percent response rate, and matched respondents with college-enrollment and graduation records from the National Student Clearinghouse. The longitudinal research design allows us to compare orientations and social characteristics measured in high school with records of college graduation up to seven years after high school.

In chapter 2, we set the stage with a review of educational trends based on national census and survey data, with a focus on race and ethnic differentials in college graduation rates. We also decompose trends and inequality in college graduation rates by race and ethnicity into components representing high school completion, the transition from high school to college, and college completion. In chapter 3, we review the origins of the UW-BHS project and evaluate its coverage and quality. Although the UW-BHS data are not a representative sample of high school seniors, many of the patterns reported here are similar to those from national studies. We also consider potential threats to the meaning and measurement of all major variables in the analysis. In chapter 4, we present the College Pathways Model, which represents key stages on the road to college graduation. We provide a rationale for the model and present an empirical analysis of student attrition at each stage of the process. We also conduct a demographic decomposition of how failure at each stage contributes to disparities in college graduation by gender, race-ethnicity, and immigration-generation status, including alternative pathways to college completion.

The objective of chapter 5 is a detailed analysis of how SES and other aspects of family-background variables affect each stage of the College Pathways Model from college aspirations to college completion. In chapter 6, we take a closer look at the role of cultural factors as an explanatory variable for college graduation rates. In addition to being full-time students, the majority of high school seniors are workers (paid employees) and almost half participate in student extracurricular activities (including sports). These nonstudent roles are analyzed in chapter 7, where we examine the stratification of student employment and activities and how

the participation in nonstudent roles affects college aspirations, expectations, preparation, college enrollment, and graduation.

Chapter 8 addresses the effects of school settings on college enrollment and graduation and analyzes the impact of the Washington State Achiever (WSA) program in five of the twelve high schools in the UW-BHS project. The WSA program, sponsored by foundation grants, aimed to expand college enrollment and graduation among low-income students with opportunities for college scholarships and other initiatives. It was an experiment introduced in sixteen low-income high schools in Washington State, several of which overlapped with the UW-BHS sample of high schools. This overlap created an opportunity for a quasi-experimental evaluation of the WSA program. With additional foundation support, the UW-BHS data collection was increased from five to nine public high schools, including five WSA schools and four nonprogram schools, plus three private high schools.

Chapter 9 summarizes our major findings and their implications for research and social policy on ascriptive inequality and educational opportunity in American society.