Education and Work: Establishing Some Terrain

The Ambiguous Relationships Between Education and Work

My goal in this book is to examine the relationship between two of the basic institutions in any society – education and work. I want to explore how the linkages between the vast number of social practices that we collectively call education (schooling, learning, training, and so on) on the one hand and those we refer to as work (the workplace, employment, labor, jobs) on the other have developed over time and what broad social trends are transforming them now. I also want to offer some empirically based, if speculative, projections about how these relationships are likely to develop in the future.

To characterize education and work as among a society's basic social *institutions* is to draw attention to their enduring and durable social characteristics. While there may be a sense in which every school building and every work setting is unique, I am more interested here in the features of schools and workplaces that transcend any particular setting. Richard Scott (1995, p. 33) has observed that institutions "consist of cognitive, normative, and regulative structures and activities that provide stability and meaning to social behavior." That is, schools and workplaces should be understood not only as places that educate students and elicit the productive behavior of workers, but also as social sites that help define the basic nature of a society and that provide a structure for how the members of that society live their lives.

Focusing on persistence and durability by no means, however, should be taken to mean that the relationships between education and work do not change greatly over time. This change can be abrupt, as with the GI Bill in the United States or the Cultural Revolution in China, or it may unfold

only over the "long duree" of decades or centuries (Braudel 1992; Collins 2000). *How* schooling and work are related varies across time and space. Still, however tentative our knowledge sometimes may be about the relationship between education and work, we know enough to identify generalized patterns and processes with some confidence.

In this book I will discuss how the structures and activities in the realms of education and work are determined by social structure, and how they in turn help constitute that structure. I will ask, for example, how a society's broader beliefs and practices about the relationship between education and work influence (but never entirely determine) what that relationship will be, and how these relationships in turn affect such things as life chances, socioeconomic inequality, and personal development.

Institutions, as Scott and others understand them, often operate at fairly high levels of theoretical abstraction. While I will spend some time on that level, I am equally or more concerned with the level at which institutional life is actually experienced. The *institutions* of education and work are generally experienced in the *organizational* settings of schools and workplaces. Schooling and working in contemporary societies are for the most part activities carried out in organizations. This is not invariably true – think of home-schooling and telecommuting, and even these have their organizational dimensions – but educational and work *organizations* exert profound influences on the lives of virtually everyone.

Despite what many sociologists (functionalists and conflict theorists alike, as I will explain later) once thought, the relationships between school and work are far from seamless. Instead, they are often tense, ambiguous, and contradictory. Schools in the United States and elsewhere, for instance, value equality and the development of citizenship, norms that often clash with workplace norms of competition and hierarchy. At the same time, competitive and hierarchical schools may be in conflict with democratic and inclusive workplaces.

These inherently contested relationships raise issues that go to the heart of contemporary debates and concerns in American (or any) society. They quickly lead to difficult questions about such important and often conflicting social values as hierarchy, equality, privilege, merit, and fairness. By doing so, they speak to value-laden concerns of what constitutes a proper education, of who should control the educational system, of what constitutes a decent working life, and of what mutual obligations exist between educators and the world of work.

The answers to these questions are not obvious, nor is the simple fact of a linkage between education and work as clear as it may at first seem. Indeed, the strength of the connection between education and work currently

found through much of the world would have at other times and places seemed utterly confusing. Historian Barbara Finkelstein (1991, p. 464) has raised the issue with exceptional clarity: "How has it come to pass that American politicians, academics, journalists, and labor leaders turn to schools to solve economic problems? What possible construction of thought about education and work could integrate economic problems and calls for school reform in this manner?" I will return to this theme repeatedly.

Education and Work: What Are We Talking About?

Both education and work cover enormously broad terrains. Researchers concerned with the workings of both schools and workplaces typically focus their attention on specific aspects of these two institutions. A given educational researcher, for instance, might confine her attention to elementary schools, or informal learning, or elite universities, or job training, or any number of other "parts" of the educational system. Likewise, a scholar of the workplace might concern himself with blue-collar workers, or occupational mobility, or marginalized workers, or other features of the experience of work. Those who examine the linkages between education and work need to make similar decisions of what to look at and what to defer for later.

Education and Work offers a chance to search for some of the breadth, hopefully without sacrificing too much of the detail and depth that is required for useful empirical research. In other words, offering this book as a synthesis and interpretation permits me the luxury of casting a broad net over "education and work." Thus, I adopt expansive (but not exhaustive) definitions of both education and work.

I take the "education" side of my title to encompass a broad array of activities and structures. These range from the socialization, instruction, and certification that occurs in elementary schools through high schools and postsecondary institutions, and then on through broader and less school-based avenues of "skill enhancement" as job training, adult education, and apprenticeships. That is, I will be considering learning that has been institutionalized in some form, but not necessarily in an institution that we ordinarily think of as a "school." As we will see, even this definition can become very fuzzy with the changing world of information technology and distance learning.

This understanding of what counts as education leaves out a great deal. Most importantly perhaps, it is not the same as "learning." People can and often do attend school without necessarily learning. Indeed, they can be credentialed, certified, and advanced to the next level of the educational

system without demonstrable learning having taken place. I am, of course, interested in how much and what kind of learning takes places in educational settings, but also in the role played by education above and beyond that of passing on knowledge.

Similarly, people learn a great deal, including much of what they know that is pertinent to their work lives, from experiences that take place outside the boundaries of formal schooling or instruction. The foremost setting in which this takes place is the family, but peers, the media, religion, and neighborhoods, among others, are powerful teachers as well. This type of learning – some of it intentional and some of it incidental – is basic to any society, but is beyond the scope of what I can address here.

Many scholars make much of the distinction between education and training. By this, they typically mean that education is a long-term process of skill development, often with the claim that it also teaches people how to learn. Training, in contrast, is more short-term and tied to the demands of the here and now. The preference for one over the other is often based on its anticipated relationship to economic reward. That is, scholars favoring education point to its durability and transferability from one setting to another (Carnevale and Desrochers 1997), while supporters of training emphasize its more immediate value to mastering a specific skill or to meeting the needs of the rapidly changing workplace (Bishop 1998).

It may sometimes be useful to remember that education and training are different, but I do not insist on that distinction in this book and more often will avoid it. It may be clear to some that what goes on in second grade classrooms is education and what goes on in a contract training program is training, but there is a large gray area in between. The point at which general skills "morph" into specific skills is a hazy one, and my preference is to keep both education and training under the same broad umbrella.

Like education, "work" is an expansive concept. There is a rich and probing literature on the conceptual and empirical distinctions between such concepts as work versus labor, toil, employment, vocation, avocation, and calling (Bernstein 1997). Indeed, much of the legacy of the sociological tradition resides in this body of scholarship. Virtually all of classical sociology's founders, from Marx's stress on property relations to Durkheim's focus on the division of labor to Weber's delineation of the relationships between religious belief systems and economic enterprise, had an abiding interest in the world of work.

Many sociologists believe that the concept of "work" has grown too inclusive to let us understand the activities by which people gain their livelihood (Karlsson 1995). Some have sought ways to achieve greater precision in what should and should not count as work (Chajewski and Newman

1998). Precision is often a good thing, but for my purposes I am going to interpret the concept of work as broadly as I do that of education. Still, even such a wide concept as "work" needs some delimitations.

Most importantly, I consider only paid work, that is, activity that is done voluntarily in exchange for monetary remuneration. This definition follows longstanding sociological practice (e.g., Dubin 1965), albeit one that some (e.g., Daniels 1987) have criticized as too narrow. While reasonable enough, and certainly immense enough, this definition leaves out an enormous range of demanding, time-consuming, and economically productive activity. For instance, unpaid domestic labor is the primary activity of much of the world's population, and it is no great stretch to think of it as the world's most important productive activity. Likewise, voluntarism is fundamental to the maintenance of many social institutions and is a source of incalculable social benefit, but is beyond my scope here. Less positively, slavery and other systems of forced labor are historically of great importance, but are not the sort of "uncoerced exchange" on which I will focus.

Even with these delimitations, my definition of what counts as work takes in a vast range of human behavior (Terkel 1997). It includes self-employment, under-employment, work that brings its incumbent tens of millions of dollars in income every year and work that brings less than a formally sanctioned minimum wage, free agency and collective bargaining, work that demands a formal relationship to the educational system and work that is unconnected to the educational realm, and work that is regarded as dirty, demeaning, and despised and work that is seen as exalted, prestigious, and professional.

What do we mean by "skills"?

I need to say a few words about one additional concept before proceeding much further. There are few concepts in the social sciences that have been used as inconsistently as that of *skill* (Vallas 1990). Variations on this concept recur throughout this book, including worker skill, job skill, cognitive skill, non-cognitive skill, distributed skill, skill breadth versus skill depth, and more. "Skill" is a multidimensional and heterogenous concept. Being quiet, hitting a baseball, designing a circuit board, pouring coffee while maintaining a smile, and repairing organ damage are all skills, but share no obvious common denominator.

When social scientists wish to statistically examine the role of skills in the relationship between education and work, they need to define, operationalize, and measure skill in ways that permit it to be used in testing hypotheses,

discarding some hypotheses as probably wrong and accepting others as provisionally right. The first step in this process is often the categorization of different kinds of skills. Dichotomous schemes are common – general versus specific skills, cognitive versus affective skills, basic versus advanced skills – but more elaborate categorizations are also available. Different research questions require different views of skills, and determining which of these many classificatory schemes is best is basically a function of how well it helps scholars answer these questions (see, among many others, Spenner 1983, 1985; Diprete 1988; Attewell 1987; Frenkel et al. 1999; Kerckhoff et al. 2001).

Sometimes I will speak of skills in this precise sense. More often, though, I will use skill in a broader sense (much as I will be using "education" and "work") to refer to a more encompassing if less precise idea. In the most inclusive sense, I will take skills to refer to any capacities to get things done. Some elaboration on this definition should help clarify what I mean.

First, "skill" is not the same thing as education. Treating one's level of schooling and one's level of skill as the same thing (or, in the language often used in the research literature, using schooling to "proxy" skill) is conventional in labor economics and common among sociologists (but see Handel 2000). Nonetheless, this practice cannot really be justified. Economists Ingram and Neumann (1999, p. 1) argue quite bluntly that "education per se does not measure skills adequately," while sociologist Alan Kerckhoff and his colleagues (2001) demonstrated that one's levels of skills and schooling are not only determined by different things, but also lead to different labor market outcomes (see also Carbonaro 2001). This point should become clearer throughout this book, but it needs to be established early that schooling and skills are related but distinct things.

Further, sometimes it is best to think of skills as characteristics of individuals, and other times to think of skills as characteristics of work tasks, jobs, or even of groups of workers. As Vallas (1990) observed, educational psychologists and human capital economists tend to see skills as something that workers have, while sociologists think about skills as inhering in jobs. A fuller understanding of skills would recognize that they are embedded in what Stinchcombe (1990) has called the "information processes" of organizations. Stinchcombe's (1990, p. 21) definition of skill deftly shows their multilayered nature:

> the capacity to routinize most of the activity that comes to a given work role in an uncertain environment . . . skill is a repertoire of routines which the workers can do accurately and fast, as well as a set of selection principles among routines, such that the complex of routines and selections among

them deals with most things that uncertainty brings to the worker. Thus, we will expect to find skill when a great many different things must be done to produce the product or service but when each of those things has to be done in several different ways depending on the situation.

This suggests that skills are elicited from specific workers or groups of workers in specific work settings. Certainly some individuals are more "skilled" than others, and some jobs demand more from their incumbents than do other jobs. Of most sociological interest, however, is how workers, jobs, and workplaces collaborate in the production, display, and rewarding of skills.

The Contested Nature of Sociological Concepts

Sociology, like any discipline, uses a set of foundational *concepts*. Phillips (1971, p. 47) sees concepts as the "building blocks" of sociological theory and research. He believes that concepts should be judged by how useful they are in helping us to understand important social processes. For Phillips, the value of a concept is largely determined by three criteria. These are clarity, scope, and systematic import. He notes that the clarity of a concept is often compromised when the term used to designate the concept is part of the lay vocabulary. This is true of many if not most sociological concepts. People may talk of coworkers as being "skilled," for example, without much worry about the precise empirical referents of what it means to be skilled. Sociologists lack that option.

By "scope," Phillips draws attention to the range of situations to which the concept applies. To continue the example, is "skill" the same thing in a software consulting firm as it is on a construction site, or on an athletic field? Can we talk about skills in the United States in the same way that we would talk about skills in Eastern Europe or South America? "Systematic import," then, is in large part a function of the clarity and scope of a concept. It refers to how successfully a concept can be used to develop propositions and theories.

To deepen their understanding of society, sociologists have to continuously rethink and recast core concepts. This has to be done carefully. Prematurely jettisoning concepts of long and proven standing can disrupt the cumulative nature of scientific research. Nonetheless, concepts need to be challenged. Indeed, many of the leading researchers in both education and work are calling for serious reappraisals of some of our bedrock concepts, such as occupational status (Hauser and Warren 2001), work (Tilly and Tilly 1998),

learning (Resnick 1987), and occupation (Barley 1996). Quite simply, the conceptual apparatus used in the scholarship on education and work is generally sturdy and durable, but can never be taken for granted.

Thus, I make special efforts in this book to explain several core or foundational concepts that underlie the analysis. (A good example of this is my discussion of skills a few paragraphs ago.) I will frequently pause to offer a closer look at such concepts as meritocracy, credentialism, postindustrial society, technology, or occupation. All of these foundational concepts are in some measure socially constructed in that how they are conceptualized and measured determines in part what sociologists observe – what they see and what they don't see. Particularly because useful sociological understandings may differ from everyday ones, I will try to make as clear as possible things that are typically taken for granted.

Education, Work, and What Else?

Education and work are but two of many social institutions. At its best, "education and work" provides us with a lens to understand a host of interesting and pressing social phenomena. Taken too narrowly, though, it can leave other institutions out of the picture. Both schools and workplaces are influenced by and in turn influence other institutions – neighborhoods, legal structures, politics, culture, and many more.

A couple of examples can illustrate this point. Kerckhoff (2000, p. 454), in examining how young people make the transition from school to work, noted that this is not achieved in any socially isolated way, but rather involves many social actors. As he remarks, "the employment decision involves others besides the employer and the prospective worker. Not only family and friends, but also schools, labor unions, trade associations, and government agencies often provide access, evaluations and recommendations that assist in matching a worker's skills to the employers needs" (see also Rosenbaum and Jones 2000). For Kerckhoff, it is only by attending to the networks that link these various social institutions that we can understand the relationships between education and work.

We can also look outside of sociology for some insight. Geographer Meghan Cope (1998) cautions against ignoring the social context in which the relationships between education and work play out. Cope examined the experience of woolen mill workers in Lawrence, Massachusetts in the 1920s and 1930s. Her analysis documented the interdependence of the linkages between home and work and showed how these linkages influenced the social regulation of labor markets. That is, by understanding how these workers

and their families conceived of the connections between their domestic lives and their economically productive lives, we can begin to see how "education" fits into these cultural and social patterns. Cope's work suggests that our current understandings of how education and work are related would have made little sense to people living in earlier eras, and that we need to think about historical and temporal *place* when we examine the relationship between education and work. How the education–work linkage "fits" with other institutions – how it is influenced by and in turn influences other institutional arrangements – is a critical part of the story.

Education and Work in the United States and Elsewhere

Most of the material on which I draw pertains to education and work in the United States. There are both benefits and costs to this strategy. On the one hand, it permits a focus on an already complex web of relationships, without being distracted by variations that arise from different cultures, histories, politics, and institutions. At the same time, it invites insularity and a temptation to view US practices as universal.

The fact is that US patterns are far from universal, and are not even particularly generalizable. The US educational system, and to a lesser degree the US "work" system, are not entirely unique among the world's societies, but are distinctive in some important ways. Still, the belief that the value of schooling lies primarily in its ability to help leverage the good life is not distinctly American, but is a belief that Americans share with most of the world. Further, while the specifics vary, every society uses education to allocate people into work roles.

This creates a real analytic and expository challenge. The evidence that school–work relationships vary greatly across the world's societies is compelling. Muller and Shavit (1998), in fact, see the cross-societal variations in this relationship as being far greater than any of the other relationships that characterize the "socioeconomic life cycle" (more on this in a later chapter). Many others have demonstrated cross-societal differences in how education and work are related (Kerckhoff 2000; Rosenbaum and Jones 2000). One cannot fully understand "the relationships between education and work" by studying only the United States (or even some small groups of nations), yet analyzing the full spectrum of the world's nations on all of the dimensions that I examine in this volume is impractical.

I search for a middle road as much as possible. Without making formal or systematic comparisons, I try at every opportunity to compare US practices

and patterns with those elsewhere around the world. I do so more through a "naming" approach than a "variables" approach. That is, I am more likely to bring in illustrative materials from different nations to help develop an argument than I am to try to specify variables-based hypotheses that hold across societies. The latter tack of course is essential for theory and research on the relationship between education and work to advance, but seems unwieldy for this sort of book.

Education and Not-work

It is striking how much of the sociological literature fits under the tent of "education and work." More than once as I prepared this book it seemed as if sociologists could find virtually nothing else to write about. To a remarkable degree, societies organize themselves around school–work relationships, and this is reflected in the volume of attention that these arrangements attract not only from social scientists, but from those in the political and cultural realms as well.

But while the terrain of "education and work" is immense, it is a mistake to think of these two institutions solely in the context of the other. Both education and work are related to a greater or lesser extent to every other major social institution. We know, for instance, that more-educated people tend to be better integrated into their social environments, more likely to participate in cultural events, and are embedded in richer social networks. Schooling similarly enhances one's emotional and physical well-being and is positively related to one's family life, political participation, values, and use of leisure time.[1] I generally ignore these kinds of relationships here to avoid being distracted from the task at hand. Readers should remember, though, that learning that education is related to better dental hygiene, or more caring child-rearing, or more appreciation for theater, or more informed voting is of interest regardless of whether or not these things eventually lead to greater labor productivity.

Thus, while I hope this book proves to be of some practical use, I do not see it as a handbook for how to make education more relevant to the world of work. Enhancing this relevance is in many cases not even a particularly good idea, and my own preference (which I will try to keep distinct from my sociological judgment) is often to weaken the linkage between schools and workplaces. Studying ancient Greek literature is not a higher calling

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1   In his article "The Effects of Schooling on Individual Lives," Pallas (2000) offers an invaluable review of this research.

than studying circuit board repair, but it is a different one. Analyzing the relationship between education and work and acknowledging its crucial location in society is not necessarily to endorse those arrangements as socially desirable ones.

Plan of the Book

After this introductory chapter, *The Sociology of Education and Work* proceeds as follows. In Chapter 2, I set the stage for the volume by asking "What *is* the relationship between schooling and socioeconomic success?" Clearly, unless this relationship can be shown to be a substantial one, there is little point in proceeding any further. This turns out to be a remarkably easy case to make – schooling and socioeconomic attainment are strongly related to one another. The extent to which this "social fact" is entrenched into American culture and social structure is a different question, and I spend some time in Chapter 2 discussing the "hold" that the relationship between education and work has in the United States.

Why this relationship should hold – why people with lots of schooling tend to have better jobs and make more money – is another question. In Chapter 3, I present two competing accounts of why educational attainment is associated with socioeconomic rewards. These are the Meritocracy model and the Credentialist model. These are broad umbrellas, and the adherents of each by no means agree on all of the specifics. Still, the contrasts between them are stark enough to illustrate the range of thinking about why schooling and work are so tightly enmeshed.

In Chapter 4, I use the model of the socioeconomic life cycle as a template to review evidence pertinent to the models of meritocracy and credentialism. My goal is not that of determining once and for all whether we can best characterize the United States as a meritocracy or a credential society. Such an adjudication seems unlikely and the question yields to no simple "either–or" answers. Rather, my goal is that of illustrating the range of ways in which scholars have attacked these questions, indicating along the way what questions are perhaps most worth asking in the future.

The Meritocracy and Credentialist models describe important features of a given society, but are perhaps less able to capture a broader understanding of social structure. In Chapter 5, I present the model of the Postindustrial Society. My goal here is to provide a means to understand the emerging social structure in which the relationship between school and work is embedded. Postindustrial theory emphasizes the centrality of "theoretical knowledge" as the United States (and other societies) continues its transformation

out of the industrial era and into the "age of information." This model forces attention to such trends as the shift from goods to services and the changing nature of work.

The framework established in Chapters 2 to 5 provides a foundation for the book's later chapters. In Chapter 6, I describe the wide-ranging demographic changes that have characterized American society for the past few decades. I take as my point of departure the baby boom, the nearly two-decade surge in birth rates that transformed American society in ways that are in many cases only now becoming clear. Closely associated with the baby boom and the subsequent baby bust are three other demographic trends that continue to transform the education-work linkage. These are the aging of the American population, the ongoing trend towards cultural diversity, and the disruption in the normative American life course.

In Chapter 7, I examine recent transformations of American education and work and how these have affected the youth labor market. On the one hand, high school is both a place that competes (probably more than it once did) with the world of work for the commitments and time of teenagers. On the other hand, we can also think of the high school experience as comprising preparation for adult work. I describe in some detail the typically difficult transition from high school to work in the United States. I also discuss the often equally problematic transition from postsecondary education to work.

Chapter 8 discusses the possibilities of the "learning society." The idea that contemporary societies can only prosper by building institutions and structures that permit "lifelong learning" has attracted considerable global and national attention. I also use Chapter 8 to provide some historical and comparative perspective on "adult education." This is an area that has received surprisingly little attention from sociologists of education, but considerably more from historians (Kett 1994). This in turn leads to a careful look at worker training, one of the largest components of the education–work nexus.

Chapter 9 builds upon the analyses of the first eight chapters to pose a basic question about the emerging relationship between education and work. This is "Can the relationship between education and work tighten forever?" While both partly rhetorical and partly provocative, this question yields no simple or unambiguous answers. Like most good questions, it raises many new ones. I address these questions by asking how employers, job-seekers, and educational institutions are likely to respond to the social tensions and demands of a demographically and technologically transformed postindustrial era. My argument is that while the social impulses that have led to the ever-tightening linkages between schooling and work are unlikely

to abate, the specific form of this linkage is going to look very different over the coming decades than it looks now.

When I was quite far along in writing this volume, I came across the following from Gosta Esping-Andersen's *Social Foundations of Post-industrial Economies* (1999, p. 184). "I therefore close this book inviting education experts to design a workable system of skilling entitlements, one that would befit an ideal post-industrial welfare regime." I think this exemplary sentiment could cut the other way as well, and that workplace experts could be invited to collaborate on designing a workable system of skilling entitlements that would befit an ideal system of open and inclusive education. Within some broad limits, we "get" the school–work relationships that we "want," but social goals have to be continuously informed by the sociological perspective. I turn to that task now.