

Introduction

Why, anybody can have a brain. That's a very mediocre commodity. Every pusillanimous creature that crawls on the Earth or slinks through slimy seas has a brain. Back where I come from, we have universities, seats of great learning, where men go to become great thinkers. And when they come out, they think deep thoughts and with no more brains than you have. But they have one thing you haven't got: a diploma.

—*The Wizard of Oz*

I have been in school continuously for over forty years.¹ First preschool, kindergarten, elementary, junior high, and high school. Then a four-year bachelor's degree at UC Berkeley, followed by a four-year Ph.D. at Princeton. The next step was what you could call my first "real job"—as a professor of economics at George Mason University. Twenty years later, I'm still here. In the fall, I'll be starting forty-first grade.

The system has been good to me. Very good. I have a dream job for life. I'm expected to teach five hours of class, thirty weeks per year. Unlike many professors, I love teaching; but even if I hated it, 150 hours a year is a light burden. The rest of the time, I think, read, and write about whatever interests me. That's called "research." My salary doesn't make me wealthy, but I wouldn't trade places with Bill Gates. His billions can't buy me anything I crave I don't already have. And I bet that even in retirement, Gates lacks my peace of mind.

Personally, then, I have no reason to lash out at the education system. Quite the contrary. Yet a lifetime of experience, plus a quarter century of reading and reflection, convince me that our education system is a big waste of time and money. Almost every politician vows to spend more on education. As an insider, I can't help gasping, "Why? You want us to waste even more?"

Most critics of our education system complain we aren't spending our money in the right way, or that preachers in teachers' clothing are leading our nation's children down dark paths.² While I semisympathize, these critics miss what I see as our educational system's supreme defect: *there's way too much education*. Typical students burn thousands of hours studying

material that neither raises their productivity nor enriches their lives. And of course, students can't waste time without experts to show them how.

Schools obviously teach some broadly useful skills—especially literacy and numeracy. High schools often include a few vocational electives—auto shop, computer programming, woodworking. Most colleges offer some career-oriented majors—engineering, computer science, premed. But what about all the other courses? All the other majors?

Think about all the classes you ever took. How many failed to teach you *any* useful skills? The lessons you'll never need to know after graduation start in kindergarten. Elementary schools teach more than reading, writing, and arithmetic. They also require history, social studies, music, art, and physical education. Middle and high schools add higher mathematics, classic literature, and foreign languages—vital for a handful of budding scientists, authors, and translators, irrelevant for everyone else. Most college majors don't even pretend to teach job skills. If you apply your knowledge of Roman history, Shakespeare, real analysis, or philosophy of mind on the job, you have an odd job.

You might defend this allegedly “useless” education on humanistic grounds. Teachers habitually claim to enrich students' lives or broaden their horizons. As a professor, I don't just sympathize with these arguments; I've lived them. The great ideas have enriched me, and I try to pay it forward. To effectively defend education, however, you need to do more than appeal to humanistic ideals. You need to ask: How often do academics *successfully* broaden students' horizons? Empirically, the answer is bleak: while great teachers can turn students into Shakespeare fans, Civil War buffs, avant-garde artists, and devoted violinists, such transformations are rare. Despite teachers' best efforts, most youths find high culture boring—and few change their minds in adulthood.

Learning doesn't have to be useful. Learning doesn't have to be inspirational. When learning is neither useful nor inspirational, though, how can we call it anything but wasteful?

Signaling: Why the Market Pays You to Kill Time

Posing this question to our sacred educational system sparks a chorus of objections. The most vexing objections, however, are my fellow

economists'. How can anyone call education *wasteful* in an age when its financial payoff has hit a record high? The earnings premium for college grads has rocketed to over 70%. Even high school graduation pays a hefty 30% premium relative to dropping out.³ If education really fails to raise worker productivity, why do employers bid so lavishly for educated labor?

Later, I will explain why these premiums are gross overestimates. For now, though, let the numbers stand. How could such a lucrative investment be wasteful? The answer is a single word I seek to burn into your mind: *signaling*. Even if what a student learned in school is utterly useless, employers will happily pay extra if their scholastic achievement provides *information about their productivity*. Suppose your law firm wants a summer associate. A law student with a Ph.D. in philosophy from Stanford applies. What do you infer? The applicant is probably brilliant, diligent, and willing to tolerate serious boredom. If you're looking for that kind of worker—and what employer isn't?—you'll make a generous offer. You could readily do so knowing full well that *nothing* the philosopher learned at Stanford applies on the job.

We're quick to draw inferences from educational history—and with good reason. Your educational record reveals much about your ability and character. When you hear someone finished a B.A. at MIT in three years, you think "genius." When you hear someone has been one class short of a bachelor's degree for the last decade, you think "slacker." When you hear someone flunked out of high school, you think "not too bright." When you hear someone flunked out of high school, then immediately aced the GED, you think "pretty bright, but really lazy" or "pretty bright, but deeply troubled."

Lesson: even if a degree did raise your pay by 70%, that would hardly prove your education "made you what you are today." Perhaps you *already were* what you are today the first time you entered the classroom. Look at your transcript, and check it against what you've actually done with your life. You could have missed a ton of coursework with no loss of on-the-job competence. Unfortunately, if you tried to skip school and leap straight to your first job, insisting, "I have the right stuff to graduate, I just choose not to," employers wouldn't believe you. Anyone can say "I have the right stuff to graduate, I just choose not to"—and firms don't give a 70% wage premium to just anyone.

Lest I be misinterpreted, I emphatically affirm that *some* education teaches useful skills, or, as economists put it, “builds human capital.” People learn literacy and numeracy in school. Most modern jobs require these skills. I learned statistics in graduate school. I use statistics in my job. When this book criticizes human capital stories, it does not reject the view that schools build *some* human capital. It rejects “human capital purism”—the view that (a) virtually *all* education teaches useful job skills and (b) these job skills are virtually the *sole* reason why education pays off in the labor market.

When this book defends the signaling theory of education, similarly, it does not claim *all* education is signaling. It claims a *significant fraction* of education is signaling. What precisely does “significant fraction” mean? First: at least one-third of students’ time in school is signaling. Second: at least one-third of the financial reward students enjoy is signaling.

Personally, I think the true fraction exceeds 50%. Probably more like 80%. My rhetoric reflects this judgment. As *The Case against Education* unfolds, however, we shall see that even if the share of signaling in our education system is as low as one-third, our education system wastes a mountain of time and money. And when you reflect on your firsthand experience with school and work, one-third signaling is the lowest share you can plausibly maintain.

To be fair, people rarely self-identify as “human capital purists.” Human capital purism is a default position, a path of least resistance. We see human capital purism whenever politicians or pundits call education funding “investment in people” without hinting that education might be anything else. We see human capital purism whenever social scientists measure the effect of education on *earnings*, then call it “the effect of education on *skill*.” We see human capital purism whenever teachers or parents end an educational sermon with, “Schools teach kids what they need to know when they grow up.”

At this point, one could object, “Though education teaches few practical skills, that hardly makes it wasteful. By your own admission, education serves a vital function: certifying the quality of labor. That’s useful, isn’t it?” Indeed. However, this is a dangerous admission for the champion of education. If education merely certifies labor quality, society would be better off if we all got less. Think about it like this: A college degree now puts you in the top third of the education distribu-

tion, so employers who seek a top-third worker require this credential.⁴ Now imagine everyone with *one fewer degree*. In this world, employers in need of a top-third worker would require only a high school diploma. The quality of labor would be certified about as accurately as now—at a cost savings of four years of school per person.

Education: Private Profit, Social Waste

Does this book advise you to cut your education short, because you won't learn much of value anyway? Absolutely not. In the signaling model, studying irrelevancies still raises income by impressing employers. To unilaterally curtail your education is to voluntarily leap into a lower-quality pool of workers. The labor market brands you accordingly.

For a single individual, education pays. On this point, the standard “education as skill creation” and the “education as signaling” theories agree. The theories make different predictions, however, about what happens if *average* education levels decline. If education is all skill creation, a fall in average education saps our skills, impoverishing the world. If education is all signaling, however, a fall in average education leaves our skills—and the wealth of the world—unchanged. In fact, cut-backs *enrich* the world by conserving valuable time and resources.

Suppose you agree society would benefit if average education declined. Is this achievable? Verily. Government heavily subsidizes education. In 2011, U.S. federal, state, and local governments spent almost a trillion dollars on it.⁵ The simplest way to get less education, then, is to cut the subsidies. This would not eliminate wasteful signaling, but at least government would pour less gasoline on the fire.

The thought of education cuts horrifies most people because “we all benefit from education.” I maintain their horror rests on what logicians call a *fallacy of composition*—the belief that what is true for a part must also be true for the whole. The classic example: You want a better view at a concert. What can you do? Stand up. Individually, standing works. What happens, though, if everyone copies you? Can *everyone* see better by standing? No way.

Popular support for education subsidies rests on the same fallacy. The person who gets more education, gets a better job. It works; you see it

plainly. Yet it does not follow that if everyone gets more education, everyone gets a better job. In the signaling model, subsidizing everyone's schooling to improve our jobs is like urging everyone to stand up at a concert to improve our views. Both are "smart for one, dumb for all."⁶

To be maximally blunt, we would be better off if education were *less affordable*. If subsidies for education were drastically reduced, many could no longer afford the education they now plan to get. If I am correct, however, this is no cause for alarm. It is precisely because education is so affordable that the labor market expects us to possess so much. Without the subsidies, you would no longer *need* the education you can no longer afford.

Ultimately, I believe the best education policy is no education policy at all: the separation of school and state. However, you can buy the substance of my argument without embracing my crazy extremism. You can grant the importance of signaling in education, and still favor substantial government assistance for the industry. If you conclude education is only one-third signaling, your preferred level of government assistance will noticeably fall, but not to zero. At the same time, I do not downplay potentially radical implications. If, like me, you deem education 80% signaling, ending taxpayer support is crazy like a fox. This is especially clear if, as I ultimately argue, the humanistic benefits of education are mostly wishful thinking.

Anyone reading this book has almost certainly spent over a decade in school. You have *vast* firsthand knowledge of the education industry. The unfolding argument takes full advantage of your decade-plus of personal experience. Please test all claims about the true nature of education against your own abundant educational experience.

This does not mean my contrarian thesis is obvious; far from it. Yet for the most part, the book does not try to change your mind about brute facts. It tries to change your mind about the best way to *interpret* facts you've known for ages. Once you calmly review your experience through my lens, I bet you'll admit I've got a point.

Education is a strange industry, but familiarity masks the strangeness. I want to revive your sense of wonder. Consider the typical high school curriculum. English is the international language of business, but American high school students spend years studying Spanish, or even French. Few jobs require knowledge of higher mathematics, but over

80% of high school grads suffer through geometry.⁷ Students study history for years, but history teachers are almost the only people alive who use history on the job. Required coursework is so ill suited to students' needs you have to wonder if your eyes are playing tricks on you.

In part, we accept this strange curriculum as “normal” because we're used to it. On a deeper level, though, we accept our education system because it “works.” If you get more school and better grades, employers reward you.⁸ What more must you know?

If you're only looking out for number one, nothing. Go to school, get good grades, make more money—the recipe is sound. But if you want to know whether your education system is a good deal for society, or if you're a curious person, the strange stuff students study is a vital clue. So is the fact that employers *pay* students extra for studying strange stuff. Faced with these clues, the orthodox view that students go to school to acquire job skills only shrugs. The signaling model of education uses these clues to detect—and solve—a great neglected social mystery.