

Lecture 4: Education for the Masses

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What we know so far

- In the 20th century, the United States experienced both long, sustained economic growth and growth in educational attainment
- Changes in wage inequality were highly correlated with changes in the education premium
- Wage premiums are driven by both the supply of skilled workers and demand for skilled workers
- Demand for skilled workers grew throughout the 20th century ("skill-biased technological change")
- Periods of decreasing inequality coincide with periods when the supply of skilled workers increased rapidly

Education for the Masses in Three Transformations

Three major transformations:

- Free, universal primary schooling

Elementary movement in 1970s

- Free, universal secondary schooling

HS movement in 1910 - 1940

- Universal college education (stalled)

College movement in 1940

↳ slowdown in educ. attainment by 1970s

Education for the Masses in Three Transformations

Why did these transformations happen earlier in the United States according to G-K?

- Public funding

Govt. support, increased taxes

- Public provision

Available to everyone

- Separation of the church and state

No discrimination by religion

- Decentralization

Don't need to convince median US voter ✓

- Open and forgiving structure (relative to Europe)

Students of all ability can go to HS

Education for the Masses in Three Transformations

High demand for secondary schooling was driven by:

- Large economic returns to additional schooling

*Tech. or electricity using firms hire more
educ. workers*

- High demand for skilled workers

- Secondary schools are an expensive, semi-private good
- Large fractions of the population had to benefit from these returns to make it worthwhile to build them

- In contrast, the effect of compulsory schooling laws was small

drop out age

Education for the Masses in Three Transformations

Demand for secondary school driven due to increasing demand for skilled workers in many sectors of the economy

- In 1870, only 10 percent of the population in jobs that required greater than primary schooling
- By 1925, 25 percent of the population were in jobs that required secondary schooling or college

Office jobs such as managers

- Share of the economy of office and sales work sectors quadrupled from 1870-1925
- Higher technology fields of manufacturing grew faster than lower technology fields over the same period

Education for the Masses in Three Transformations

Education was key to occupational mobility

Table 5.2. Education and Occupation: Iowa 1915

Early 20th Century

About 50%
of managers
were HS
grad.

Occupational Groupings	Native-Born Males, 25-34 Years			Native-Born Males, 35-44 Years		
	Highest Grade (years)	% with High School	% High School Grad.	Highest Grade (years)	% with High School	% High School Grad.
Professional and managerial	12.1	71.6	<u>50.0</u>	11.5	59.5	41.8
Ordinary white-collar	10.7	62.5	39.2	10.6	57.9	38.9
Blue-collar	8.4	20.2	8.3	8.2	17.5	9.2
Farmer	8.8	18.1	6.9	8.7	16.4	7.6
Farm laborer and servant	8.2	17.9	6.6	7.8	9.5	5.2
Total for all occupations	9.2	30.2	16.3	9.2	28.1	17.1

Occupational Groupings	Native-Born Females, 25-44 Yrs		
	Highest Grade (years)	% with High School	% High School Grad.
Professional and managerial	12.9	88.1	67.6
Ordinary white-collar	10.8	67.4	47.4
Blue-collar	9.0	33.0	13.5
Farm laborer and servant	8.5	21.0	9.7
Total for all occupations	10.3	48.5	36.1

Office jobs require more educ.

Schooling laws explained about $\approx 3/52$ 5 percent of enrolment growth

By 1910 most states had min age drop out

Table 6.2. Impact of State Compulsory Schooling and Child Labor Laws on Secondary School Enrollment Rates, 1910 to 1938

Dependent variable: Fraction of state's 14- to 17-year-olds enrolled in public and private secondary schools (mean = 0.441; s.d. = 0.204)	(1) Coefficient (s.e.)	(2) Mean (s.d.)
Continuation school law	0.0249 (0.00940)	0.530 (0.499)
Child labor school years ^a	0.00777 (0.00265)	6.51 (2.00)
<u>Compulsory school years^b</u>	0.00453 (0.00209)	6.91 (2.67)
No child labor law	0.0217 (0.0185)	0.299 (0.170)
No compulsory schooling law	0.0563 (0.0167)	<u>0.102</u> (0.303)
Autos per capita	0.865 (0.187)	0.136 (0.093)
Manufacturing employment per capita	0.134 (0.409)	0.0662 (0.0389)
Fraction ≥ 65 years	3.06 (1.39)	0.0511 (0.0128)
Fraction ≥ 14 years	-2.10 (0.583)	0.305 (0.0474)
Other state demographic controls ^c	Yes	
State dummies	Yes	
Year dummies	Yes	
Census division trends	Yes	
R ²	0.978	
Standard error	0.0321	
Number of observations	720	720

3% ↑ in HS enrtd

Sum. stats for each X
↓
mean, stdev

only 10% of states did not have compulsory law

$HSEnrol_{st} = \beta_0 + \beta_3 CompSch_{st} + \dots + \epsilon_{st}$

result
 $\beta_3 > 0$

52% ↑ HS enroll from 1910-1938

Education for the Masses in Three Transformations

The next great transformation was the college movement:

- High returns to college education led to increasing demand for colleges
- Competition of public and private colleges produced many high quality institutions, available to large numbers of students
- But in recent decades, college graduation rates have stagnated or declined

→ Low quality HS not preparing students to complete college