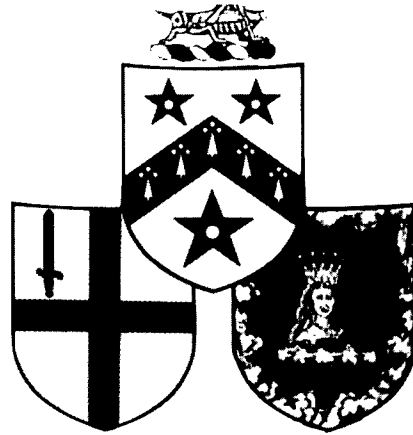


*G R E S H A M*  
*COLLEGE*



**EDUCATION FOR ENTERPRISE**

Lecture 4

**AN AMERICAN DREAM**

by

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## GRESHAM COLLEGE

### An American Dream

### Tom Cannon, Mercers' School Memorial Professor of Commerce at Gresham College

#### *Shared Myths*

During my lectures at the end of last year, I highlighted the persistence of the view that education and entrepreneurship are poorly connected. You may recall that I quoted Andrew Carnegie's view expressed when speaking to at one of the Ivy League Universities that:

*I would almost as soon leave a young man with a curse as burden him with the almighty dollar. It is not from this class that you have rivalry to fear ... look out for some boys poorer, much poorer than yourselves, whose parents cannot afford to give them the advantages of a course in this institute, advantages which **should** give you a decided lead in the race – look out that such boys do not challenge you at the post and pass you at the grand stand. Look out for the boy who has to plunge into work direct from the common school and who begins by sweeping out the office.*

It was theme Carnegie returned to several times, in a later speech he said:

*The Millionaires who are in active control started as poor boys and were trained in the sternest but most efficient of all schools – poverty.*

Carnegie's opinions had a power and influence that extended beyond his immediate audience because he was seen as:

*The most typical figure of the industrial age ... A poor immigrant boy from Scotland, he followed and helped to perpetuate the American tradition of rising from poverty to riches<sup>1</sup>.*

This view that Carnegie has an unusually important symbolic power recurs in later writing<sup>2</sup>

*There are many reasons why Carnegie should be the avatar of the American Experience. He came from humble origins. He was spectacularly successful. He*

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<sup>1</sup> Morrison, S.E. and Commager, H.S. *The Growth of the American Republic* New York, Oxford University Press, 1930

<sup>2</sup> Temin, P. *Iron and Steel in Nineteenth Century America: An Economic Inquiry* Cambridge, MIT Press, 1964

*gave it all up at the age of 65 to devote himself to philanthropy, building libraries throughout the country and working for world peace. He wrote a most engaging autobiography. And the ease with which Carnegie's ability was rewarded step by step as he progressed up the railroad and then the industrial ladder appears to make him the quintessential American<sup>3</sup>*

### **A Century On**

It is striking that a century on similar images retain their power. In previous lectures I have described the image created around Richard Branson, Anita Roddick and others in the UK. Similar word pictures exist about their most famous US counterparts:

*These pioneers of personal computing were people who had little previous work experience and no previous success. (Steve)Wozniak<sup>4</sup> was an undistinguished engineer at Hewlett-Packard. (Steve)Jobs<sup>5</sup> worked part-time at a video game company. Neither had graduated from college. Bill Gates started MicroSoft after dropping out of college during his sophomore year. They were just smart kids who came up with an angle that they have exploited to the full<sup>6</sup>.*

This notion that success comes to those who "came up with an angle" or "found their own style" recurs in the comments of successful entrepreneurs – from Estee Lauder to P.T.Barnum

*I never yet met anyone who learned her business from a book or school, just as I have never met anyone who raised a wonderful child from a book. Each business must find a style, that voice that grows louder with each success or failure<sup>7</sup>.*

*Nine out of ten of the rich men in our country today started out in life as poor boys, with determined wills, industry, perseverance, economy and good habits. They went on gradually, made their own money and saved it; and this is the best way to acquire a fortune. Stephen Girard started life as a poor cabin boy ... John Jacob Astor was a poor farmer boy ... Cornelius Vanderbilt began life rowing a boat from Staten Island to New York<sup>8</sup>.*

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<sup>3</sup> Temin, P. "The American Business Elite in Historical Perspective" National Bureau of Economic Research, Historical Paper 104, 1997

<sup>4</sup> Co-founder of Apple Computers (he build the first Apple Computer)

<sup>5</sup> Co-founder of Apple Computers

<sup>6</sup> Cringley, R.X. *Accidental Empires* London, Penguin, 1992

<sup>7</sup> Estee Lauder quoted in

<sup>8</sup> P.t. Barnum quoted in

It is easy to see the appeal of these views to the entrepreneurs and the wider society. There is abundant evidence that the search for independence is, perhaps, the most powerful drive behind entrepreneurial activity. The notion that they were not dependant on institutional support – like a good education – had obvious appeal. Similarly, society can step back from the entrepreneurial process – leaving it to natural talent, drive or energy – if education or other social interventions have no effect.

Unfortunately, the signals and aggregate data are not so clear cut. Bill Gates might drop out from Harvard but he did attend. Equally powerful elements in the Gates story were that he went to Lakeside – Seattle's most exclusive school – where, among other things, he achieved a perfect 800 score in Maths. It is said that his disappointment with Harvard was that "he went to Harvard to learn from people smarter than he was – and left disappointed."

Even Cringely<sup>9</sup> – who is so articulate on the limited role of education on the successes of Jobs and Gates – eventually admits that the entrepreneurs behind the success of the electronics industry in the USA during the 1980s and 1990s were:

*A motley group of hobbyist/opportunists who saw a niche that needed to be filled. Mainly academics and nerds. They had no idea how businesses were supposed to run, no sense of what was impossible, so they faked it, making their own way of doing business.*

### **A Discordant Note**

This discordant note – that academics or those with a strong grounding in education can play a powerful role in entrepreneurial activity raises important questions about the thesis that there is little connection between education and entrepreneurial success. Perhaps the most sustained critique emerges from detailed analysis of the composition and background of the US business and entrepreneurial elites at key points over the last two hundred years. Temin's question "(are) people like Carnegie typical of the American business elite or (are) they exceptions to a rather different rule?"

In an earlier study of the USA business and entrepreneurial elite, Miller<sup>10</sup> examined the backgrounds of 190 business leaders in the first decade of the twentieth century. He wanted to test the common assertion that "anyone can become president of large business firms." In fact, he found that these entrepreneurs and business leaders "had common social characteristics that distinguish them from the common run of Americans of their time." In Miller's

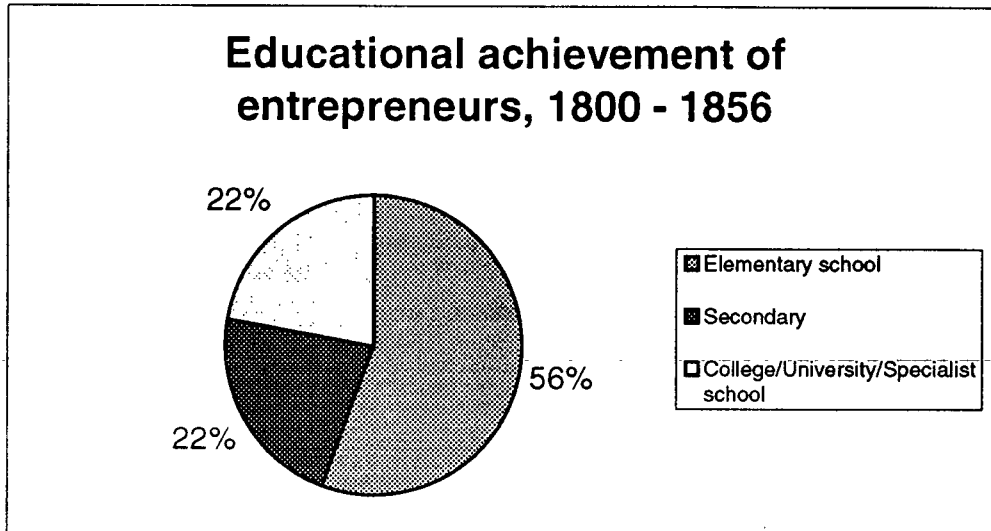
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<sup>9</sup> Cringely, R.X. *Accidental Empires* London, Penguin, 1992

<sup>10</sup> Miller, W. *Men in Business* New York, Harper and Row, 1962

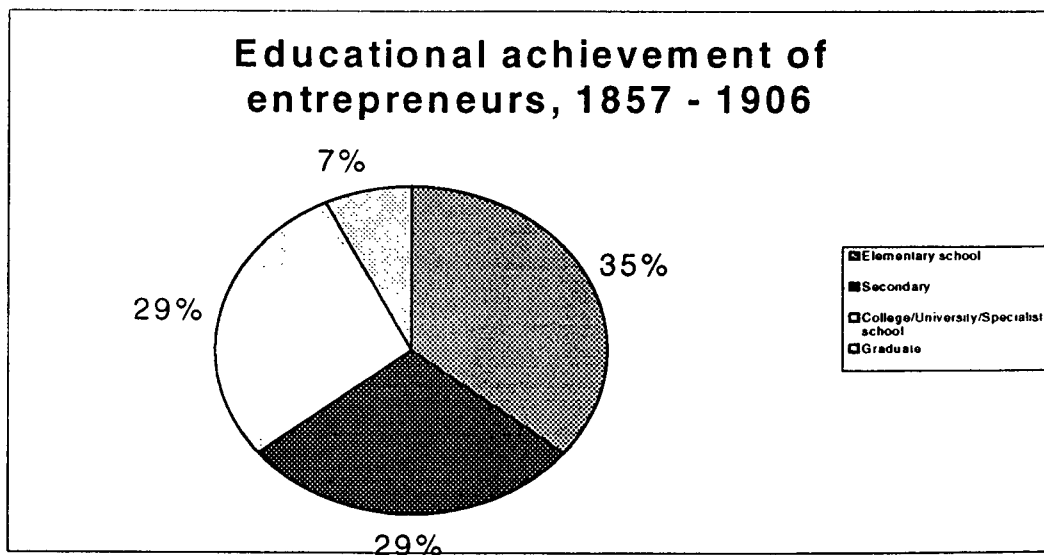
analysis, it emerged that elite entrepreneurs and business leaders were far more likely to have a college education than the rest of the US population. Their educational attainment and that of their parents was a major determinant of their position within the entrepreneurial elite.

A closer examination of the educational attainment levels of significant first generation entrepreneurs during the first and second industrial revolutions highlights a similar link.

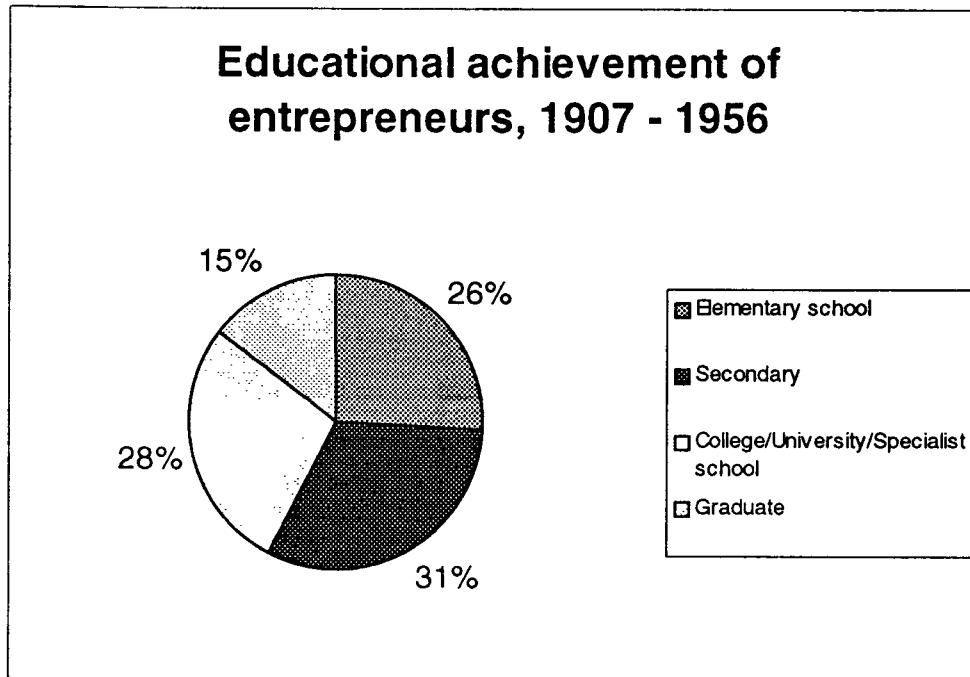


At a time when college or university participation rates in the USA were less than ten per cent, successful entrepreneurs were more than twice as likely to attend college or university.

This pattern was repeated with the cohort of entrepreneurs who emerged to dominate US industry in the second half of the last century – with much higher



rates of higher education participation than the rest of the US population.



Temin's research suggests that the specific and general character of the US entrepreneurial elite has shown a mixture of change and stability. The defining entrepreneur is more likely to be like Charles Wang:

*Charles Wang, CEO of Computer Associates is reminiscent of Andrew Carnegie. He immigrated to the United States with his family when he was eight, slightly younger than Carnegie. His family, like Carnegie's was not successful immediately: Wang is quoted as saying, "I know what it is like to be hungry." Wang also succeeded in business by harnessing a new technology. Carnegie was at the forefront of steel-making; Wang, business computing. Unlike Carnegie's father, Wang's father had been educated at Harvard and successful in China before emigrating.*

*Wang differed from Carnegie in one important respect. He went to college and school in the United States. This is an important difference ... education is an important characteristic of American business leaders<sup>11</sup>.*

Temin goes on to point out that college graduates are about seven times more likely – than would be predicated from their share of the total population – to become successful entrepreneurs and business leaders. While the overall structure of the US business elite has shown remarkable stability over the century – it is still overwhelmingly male, white and WASP – its educational attainment levels have sharply increased.

<sup>11</sup> Temin (1997) *ibid*

### ***A Gender Opportunity***

For the majority of entrepreneurs education does not seem to have a marked effect on male entry to entrepreneurial activity<sup>12</sup>. There is considerable evidence that prior education has a marked effect on female entry into entrepreneurial activity<sup>13</sup>.

*Many of these cross-sectional female entrepreneurship studies have found their samples to be better educated than the general population. For example, DeCarlo and Lyons (1979) found that their sample of 122 female entrepreneurs from the mid-Atlantic states were better educated than the average adult female. Mescon and Stevens (1982) found that two-thirds of their sample of 108 female entrepreneurs from Arizona had attended college, and 15 percent had pursued graduate degrees.*

There are, however, some discordant findings

*Related studies considering differences in educational attainment between men and women indicate that the level of educational attainment is roughly equivalent (Birley, Sanders, & Moss, 1987).*

The most recent longitudinal study is clear in its conclusions;

*the likelihood of being self-employed for both the continual stayer and the re-entry increases with increased levels of educational attainment. To more specifically gauge continuous stayer and re-entry status sample differences we consider results pertaining to the likelihoods of continuous survival and re-entry by duration since initially entering into self-employment .... The continuous survival results indicate that the likelihood of survival after any given number of years since initially entering into self-employment is uniformly greater at increased levels of educational attainment. However, these education sample survivor differences are most pronounced in the later years. For example, the likelihood of survival after 3-4 years for the least-educated, high-school-only graduate, and the some-college-or-more samples is 11.9, 13.2, and 16.2 percent, respectively. After 9-10 years, however, the relative likelihood differences between the samples dramatically increase to 1.5, 3.0, and 9.5 percent, respectively.*

Education does, however, have significant effect on success rates for all groups:

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<sup>12</sup> Schiller, B.R. and Crewson, P.E. "Entrepreneurial Origins: A Longitudinal Inquiry" Economic Inquiry, July, 1997

<sup>13</sup> Dolinsky, A.L., Caputo, R.K., Pasumarty, K. and Quazi, H. "The Effects of Education on Business Ownership: A Longitudinal Study of Women" Entrepreneurship: Theory and Practice, Fall, 1993

*Education emerges as a significant performance correlate as well. Having some college experience enhances the prospects for success, when compared to entrepreneurs with only twelve or fewer years of schooling. Total work experience is not significant, but the experience with self-employment is. This presumably reflects not only the pay-off to "learning-by-doing" but also the attrition rate of failed entrepreneurs who recognise the futility of their efforts early on<sup>14</sup>.*

### **Conclusion**

The USA has a strong tradition of linking education – especially higher education – with entrepreneurial success. This is vividly illustrated today in the powerful links between Universities and high technology companies in San Francisco, Boston, Seattle and Colorado. Study of these links highlight the social and economic gains from a strategy to exploit the positive relationship between education and entrepreneurial success.

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<sup>14</sup> Schiller (1997) ibid



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## **Policy & Objectives**

An independently funded educational institution, Gresham College exists

- to continue the free public lectures which have been given for 400 years, and to reinterpret the 'new learning' of Sir Thomas Gresham's day in contemporary terms;
- to engage in study, teaching and research, particularly in those disciplines represented by the Gresham Professors;
- to foster academic consideration of contemporary problems;
- to challenge those who live or work in the City of London to engage in intellectual debate on those subjects in which the City has a proper concern; and to provide a window on the City for learned societies, both national and international.

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