

Education and Work in the 21st Century: Credential Inflation or Transformation?

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Many people argue that education no longer guarantees a good job. They argue that the college degree is the new high school diploma. We refer to this idea as “credential inflation.” Additionally, some scholars have argued that employers increasingly use technology in the workplace to pay less for workers with higher levels of education— a process called “digital Taylorism.” However, other studies suggest that as the overall level of education increased, employers made jobs more cognitively complex to incorporate a more highly educated and skilled workforce. We used the unique nature of the 2012 Program for the International Assessment of Adult Competencies (PIAAC) dataset and its precursors—the 1994 International Adult Literacy Survey (IALS) and the 2003 Adult Literacy and Lifeskills (ALL) survey—to test the relationships between education, cognitive skills, job tasks, the use of technology, and labor market outcomes over time.

Effects of Education on Earnings

- Years of education had larger, positive effects on earnings in 2012 compared to 2003; Literacy was also significantly related to earnings in both years.
- In 2012, years of education and the use of Information Communication Technology (ICT) at work had positive, statistically significant effects on earnings.

Likelihood of Being Employed

- Regression analyses suggested that for each additional year of education, Americans were 15% more likely to be employed in 1994 and 14% more likely to be employed in 2012; Literacy was also positively related to employment (estimates were statistically significant).

Likelihood of Being a Supervisor

- For each additional year of education, Americans were 20% more likely to be a supervisor in 1994 and 11% more likely to be a supervisor in 2012 (estimates were statistically significant).

Likelihood of Performing Job Tasks

- Between 1994 and 2012, people with similar levels of education were more likely to complete complex job tasks “less than once per week”.
- Years of education and literacy skills were both positively related to the frequency with which workers perform complex job tasks (estimates were statistically significant).

Summary

We found little evidence to suggest that as Americans became increasingly educated, years of education were less valued in the labor market over time. Because use of ICT was positively related to income, we refuted the idea that employers used technology to deskill jobs and lower wages. We found that as aggregate levels of education increased between 1994 and 2012, people with similar levels of education were more likely to perform complex job tasks in 2012.

Recommendations

Policymakers and practitioners should focus on (a) increasing access to higher education; (b) strengthening the relationship between education and cognitive skills; (c) developing a better understanding of the effects of education and the changing nature of work in the 21st century.