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HIGH SCHOOL GRADUATION RATES IN WASHINGTON AND THE UNITED STATES: A LONG-RUN VIEW

At the February 2005 meeting of the National Governors Association, special attention was focused on America's high schools. Bill Gates delivered a keynote address on how high school graduation rates and other performance measures indicate that "America's high schools are obsolete." He then called for an effort to redesign the American high school.¹

The purpose of this short report is to present updated data on Washington's high school graduation rates, along with the national rate.² We also highlight results from our recent report on the long-run implications of not graduating from high school.

Since 1965, High School Graduation Rates Have Hit a Plateau

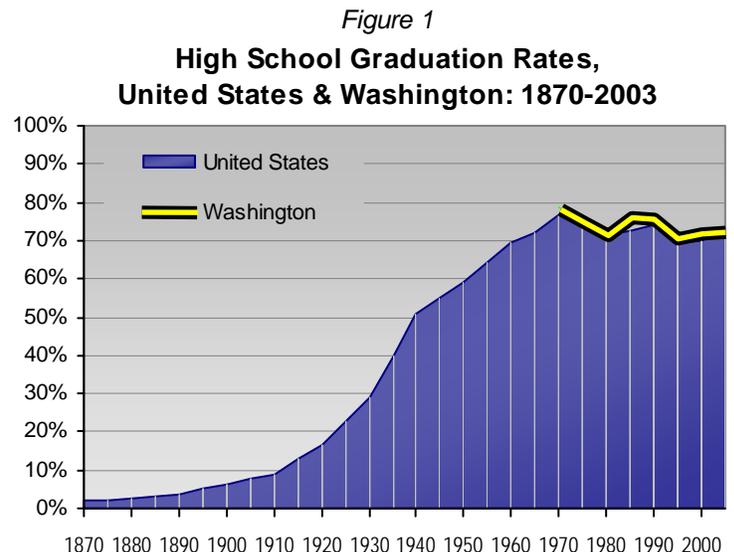
Figure 1 provides a long-run view of high school graduation rates in the United States and Washington.³

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¹ The press release from the National Governors Association meeting can be obtained at: http://www.nga.org/nga/newsRoom/1,1169,C_PRESS_RELEASE^D_8030,00.html. The text and video of Mr. Gates' speech can be viewed at: <http://www.gatesfoundation.org/MediaCenter/Speeches/BillGSpeeches/BGSpeechNGA-050226.htm>.

² Our previous findings were published in: S. Aos, R. Lieb, and R. Barnoski, *Trends in At-Risk Behaviors of Youth in Washington*. Olympia: Washington State Institute for Public Policy, 1996.

³ There has been controversy regarding how to calculate high school graduation rates. Some analysts simply calculate an annual rate by dividing the percentage of graduates in the spring of one year by the number of students enrolled the previous fall. A more useful indicator measures a "cohort" rate. The cohort rate takes the number of ninth-grade students in one year and then determines the percentage of those students who graduate on-time from high school four years later. Unfortunately, because of the way statistics have been kept, this useful measure cannot be computed historically. The federal National Center for Education Statistics (NCES) produces an alternative long-run glimpse at national graduation rates by dividing the total number of public and private high school graduates in a year by the number of 17-year-olds in the United States in the same year. This produces a simple version of an "on-time" graduation rate, although not all graduates in a given year are from the cohort of youth four years



Source: National Center for Education Statistics, CFC, OSPI, OFM, see footnote 3

Several points are revealed in Figure 1:

- ✓ While reliable data for Washington are only available since 1970, Washington's high school graduation rates mirror the national average rate.
- ✓ Throughout much of the twentieth century—until the mid-1960s—high school graduation rates increased steadily. In 1900, for example, only about 6 percent of youth graduated from high school; by the 1965-66 school year, the rate had grown to about 76 percent.
- ✓ Since the mid-1960s, however, the high school graduation rate for Washington and the United States has apparently hit a plateau, and has even trended down slightly. When viewed from the perspective of 13 decades, it is clear that progress in increasing graduation rates halted in the mid-1960s. The high school graduation rate today is just a bit over 70 percent, marginally lower than it was in 1965. Thus, the lack of improvement in graduation rates is not a recent phenomenon, but has been a persistent problem for nearly 40 years.

earlier. To be consistent with this national data series, in this report we calculate Washington's "on-time" graduation rate the same way NCES does for the national rate.

Growing Popularity of the GED

An alternative to graduating from high school is earning a General Educational Development (GED) certificate.⁴ The GED program began during World War II. Today it is a five-part test that takes about eight hours to complete.

Figure 2 shows the approximate percentage of 17-year-olds in Washington who either graduated from high-school on time or received a GED certificate before the age of 20.⁵ The percent opting for the GED increased in the last 30 years—from less than one percent of teens in the early 1970s to over six percent in 2003.

Given the growing popularity of the GED, a natural question is whether the GED is equivalent to a high school diploma or whether it is inferior. Researchers who study this question usually compare earnings of GED recipients to high school graduates or dropouts without a GED. The current research consensus establishes these points:⁶

- ✓ High school graduates earn more than GED recipients in the labor market. That is, as measured by later economic success, it is better to finish high school than to drop out and get a GED.
- ✓ Among those who drop out of high school, however, obtaining a GED can improve long-run labor market earnings—but *only for those who leave school with weak cognitive skills*. The GED apparently does not help the economic performance of dropouts who leave school with higher academic skills.
- ✓ Having the option to obtain a GED may cause some students to drop out of school, although the statistical evidence for this finding is not as strong as that for the previous two findings.

Benefits of Graduating From High School

In 2004, the Washington legislature directed the Washington State Institute for Public Policy to study the benefits and costs of prevention

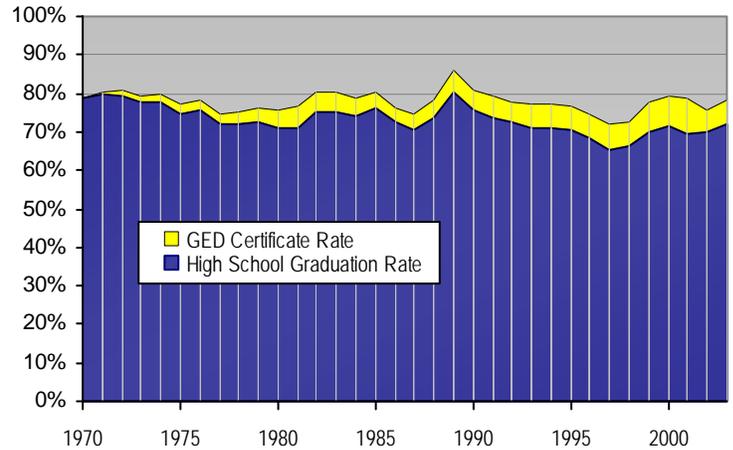
⁴ In general, GED recipients are not to be counted as high school graduates under the federal No Child Left Behind Act.

⁵ We employ the same definition for “on-time” high school graduation as we used for Figure 1. GED certificate rates are calculated as the number of GEDs issued to persons under age 20 divided by the number of 17-year-olds in Washington.

⁶ Our conclusions are based on a recent comprehensive summary of the national GED research: John H. Tyler “The Economic Benefits of the GED: Lessons from Recent Research.” *Review of Educational Research* 73(3) (2003): 369-403.

Figure 2

Washington's High School Graduation and GED Certificate Rates: 1970-2003



Source: CFC, OSPI, OFM, SBCTC, see footnotes 3 and 5.

programs that can improve the high school graduation rate.⁷ In that study we estimated the value of graduating from high school and found the following:

- ✓ High school graduates earn 24 percent more money over their lifetime than non-high school graduates.⁸
- ✓ In a recent empirically-convincing study, graduation from high school was shown to be related to reduced levels of adult crime.⁹ We estimate that high school graduation reduces the chance of future adult criminal activity by about 10 percent.
- ✓ In addition to increased earnings and less crime, there is growing evidence that education is causally linked to other benefits such as greater civic participation and improved health outcomes.¹⁰

Thus, Bill Gates' challenge to improve high schools seems relevant: graduating from high school clearly generates significant benefits, yet improvement in the rate of high school graduation has stalled for nearly 40 years.

⁷ In addition to education outcomes, our study also estimated the effects of programs on crime, substance abuse, child abuse and neglect, teen pregnancy, and teen suicide. S. Aos, R. Lieb, J. Mayfield, M. Miller, and A. Pennucci. *Benefits and Costs of Prevention and Early Intervention Programs for Youth*, Olympia: Washington State Institute for Public Policy, 2004.

⁸ This estimate is based on an analysis of Current Population Survey data, and includes an adjustment for self-selection bias.

⁹ L. Lochner and E. Moretti. “The Effect of Education on Crime: Evidence From Prison Inmates, Arrests, and Self-reports.” *American Economic Review* 94(1) (2004): 155-189.

¹⁰ B. L. Wolfe and R. H. Haveman. “Social and Nonmarket Benefits From Education in an Advanced Economy.” Proceedings from the Federal Reserve Bank of Boston's 47th economic conference, Education in the 21st Century: Meeting the Challenges of a Changing World, 2002.