## "Is the Glass Emptying or Filling Up? Reconciling Divergent Trends in High School Completion and Dropout"

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### ABSTRACT

Most people understand that the rate at which young people complete high school increased dramatically until the 1970s or 1980s, and has increased gradually ever since. This understanding is based entirely on data from the Current Population Survey (CPS), and from status- and event-dropout measures that are derived from the CPS. However, researchers using a variety of techniques to compare the number of high school diplomas that are issued each academic year to the number of young people eligible to receive them have found that the high school completion rate has declined modestly (but quite steadily) since at least the early 1970s. Our paper is an effort to reconcile this apparent contradiction. We hypothesize that this discrepancy is primarily due to (1) differences in the way in why GED recipients are classified and (2) misreporting of high school graduation status by CPS respondents.

#### EXTENDED ABSTRACT

Most people understand that the rate at which young people complete high school increased dramatically until the 1970s or 1980s, and has increased gradually ever since. This understanding is based entirely on data from the Current Population Survey (CPS) or the U.S. Census, and from status- and event-dropout measures that are derived from those data. For example, Figure 1 reports the percentage of 20 to 24 year olds in the 1940 through 2000 decennial U.S. censuses who have not completed high school; note that these are self-reports, and that GEDs are implicitly (in earlier years) or explicitly (in later years) counted as high school completion.

According to Figure 1, the rate at which young people failed to complete high school dropped precipitously from (at least) 1940 through 1970, and then declined more gradually until 1990. Figure 1 fits with the understanding of trends in the U.S. high school dropout rate that is most frequently represented in the population press, in federal government reports, in high school and college textbooks, and elsewhere.

However, using data from the Common Core of Data (CCD) and a variety of measurement techniques, researchers have recently compared the number of high school diplomas that are issued each academic year to the number of young people eligible to receive them. These observers have come to conclusions that are quite different from

those depicted in Figure 1. They have found that the high school completion rate has declined modestly (but quite steadily) since at least the early 1970s.

In their most rudimentary form, these measure simply compare the number of high school diplomas issued at the end of one academic year to the number of 9<sup>th</sup> graders enrolled in the fall three academic years earlier (e.g., the Basic Completion Rate developed by Walt Haney and colleagues). More sophisticated measures adjust this measure to account—with varying degrees of success—for migration and 9<sup>th</sup> grade retention, both of which bias measures like the Basic Completion Rate. Such measures include the Estimated Completion Rate (Warren), the Cumulative Promotion Index (Swanson), and the Adjusted Completion Rate (Greene and colleagues).

Figure 2 depicts trends in high school completion rates since the mid 1970s using these four CCD-based measures of high school completion. Although these measures do not produce identical results, all four suggest that the high school completion rate has declined modestly but steadily from almost 80% in the mid-1970s to about 70% in 2000.

How can it be true that high school dropout—measured using Census or CPS data—has become less common since the 1970s, while at the same time high school completion—measured using CCD data—has <u>also</u> become less common over that time period?

Our paper is an effort to reconcile this apparent contradiction. We hypothesize that this discrepancy is primarily due to (1) differences in the way in why GED recipients are classified and (2) misreporting of high school graduation status by Census/CPS respondents.

#### GED Recipients

The CPS and the U.S. Census have historically not differentiated between diploma recipients and GED recipients, whereas the CCD-based measures described briefly above only count high school diplomas as high school completion. Figure 4, which is based on CCD data and data on GED acquisition from the American Council on Education, reports the percentage of 16 to 19 year old New York high school completers who completed high school via a GED. Whereas only about 7% of New York high school completers in this age group completed high school by obtaining a GED in 1989, that figure had risen to 11% just 12 years later. Similar trends are observed in other states. Consequently, it may be that part of the discrepancy in Census/CPS-based versus CCD-based trends in high school dropout/completion is due to the increasing frequency with which young people obtain GEDs. In this sense, both the Census/CPS-based trends (toward less high school dropout) and the CCD-based trends (toward less high school completion) may be true. In general, young people may be more likely over time to complete high school *one way or another*, but less likely over time to obtain an actual high school diploma.

Reporting Errors in the Census/CPS

A second possible explanation for the discrepancy between CCD-based and Census/CPSbased trends in high school completion has to do with reporting errors. Whereas CCD data are based on states' administrative reports to the federal government—which are certainly subject to their own forms of error—Census and CPS data on high school completion/dropout is based on respondents' self-reports of their educational achievements. It may thus be the case that part of the discrepancies between CCD-based and Census/CPS-based trends in high school completion may be attributable to Census/CPS respondents' increasing tendency to report that they have completed high school when in fact they have not.

Although we are not yet prepared to rule out this possibility, Figure 5 calls it into question. Figure 5 reports the number of individuals in the 1975 through 2000 October Current Population Surveys who reported completing high school in the last year. The instability in this line is due to sampling variability. Figure 5 also reports the CCD-based number of public school diplomas issued in each of those years. In general, the CCD data include about 200,000 fewer high school completions annually than are reported by respondents to the CPS. However, when the CCD-data are supplemented with data on the number of graduates from *private* high schools (only possible in selected years), the rate of over-reporting of high school graduation appears much smaller.

In our paper we will utilize data from the Census, the CPS, and from other sources to come to a better understand of trends in the rate at which young people complete high school. Perhaps more importantly, we will come to a better understanding of trends over time in the manner in which young people complete high school.

Figure 1. Percentage of 20 to 24 Year Olds in the U.S. Census Who Have Not Completed High School, 1940-2000



Figure 2. Ratio of Number of Pubic High School Diploma Recipients to the Number of Students Eligible to Obtain a Diploma (Various Formulations), Graduating Classes of 1975 to 2000



#### Figure 3. Percentage of 20 to 24 Year Olds in the October CPS Who Have Completed High School, by Age, 1968-2000



# Figure 4. Percentage of 16 to 19 Years Olds in New York who have Completed High School via a GED, 1989 - 2001



Figure 5. High School Graduates, by Source of Data, 1968-2000

