The GED Experiment and Policy Related Research: A Model to Inform Evidence Based Practice in Adult Literacy Education

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Abstract: This paper reviews the findings from existing GED statistics and policy-related research reports that have utilized longitudinal data-bases to track GED test takers and the effects of the GED; and it uses the GED data-based system as a model to envision a national adult literacy data-based system.

Introduction

In a relatively short period of time, the General Education Diploma (GED) has been transformed from an obscure military-related credential to the primary second chance credential for high school non-completers. The first tests were administered in 1943 to returning World War II (WWII) veterans to certify their skills for postsecondary education. It worked! A total of 39,000 individuals were tested in 1947 (Tyler, 2004). Also in 1947, veterans represented a tremendous boost to the enrollments of postsecondary institutions; they constituted 49 percent of college enrollment in the U.S. Since 1943 more than 17.3 million individuals have passed the GED tests. For the first time, over one million individuals took the tests in one year in 2001, and they represented one fourth of the high school diplomas (plus GED) issued in 2001. It is now thereby considered a major component in the U.S. educational system (Tyler, 2004).

Although the GED has demonstrated its historical importance as a second chance credential within the U.S. educational system, it is essentially a giant experiment that affects the lives of millions of adult learners and their families. However, unlike much of adult education, the GED Testing Service maintains a carefully organized and researchable data-base that utilizes the Social Security numbers of participants, and thereby provides the means to link these outcome data with other government data-bases. These collective data-bases provide a highly reliable means for researchers and policy makers to systematically assess the effectiveness of the GED credential via the monitoring and tracking of GED test takers as they pursue the GED, enter employment or the military, obtain job training, and (or) pursue postsecondary opportunities. These data have been used by researchers to address a number of questions regarding the effectiveness of the GED in assisting test takers to take advantage of educational and employment opportunities. However, the information available from the research on the GED has been under-utilized by adult education practitioners, and we have failed to view this data-based system as a model to inform evidence-based practices in adult literacy education.

The purpose of this paper is to: a) review the literature and findings from existing GED statistics and policy-related research reports that have utilized longitudinal data-bases to track GED test takers and the effects of the GED; and b) use the GED data-based system as a model to envision a national adult literacy data-based system that could foster effective research to inform evidence-based adult literacy practice. The following questions will be addressed: How have longitudinal and data-based research efforts informed stakeholders regarding the effectiveness of the GED credential? How can the research efforts that generate findings regarding the effectiveness of the GED be used as a model to guide the needs for research to inform policy and...
evidence-based practice in adult literacy education? Several topics will be discussed in the paper: source of future GED students; research results regarding the effectiveness of the GED; and a framework for a national evidence based system to track the inputs and the effectiveness and efficiency of adult literacy education programs and services.

Source of Future GED Students

A major source (i.e., inputs) for the GED are the students who fail to complete HS. Tyler and Lofstrom (2009) argue that the national high school dropout rate has remained somewhat stable (i.e., between 22 and 25 percent) over the recent decades. Due to the variability of the high school dropout statistic, Tyler and Lofstrom (2009) argue that the high school graduation rate is a more informative statistic. Drawing on a study by Heckman and LaFountaine, they conclude that the overall current graduation rates are in the 75 to 78 percent range. It is highest among whites (84%) and lower among Hispanics (72%) and African Americans (65%). The numbers of HS students leaving early is problematic because of the increased literacy demands in our Information Age society, and the fact that they add to an existing low-literate adult population.

Demographics of U.S. Non-Completers

In 2005, 39 million (18%) of U.S. adults aged 16 and older lacked a H.S. diploma. About 3.3 million youths (ages 15-24) were school non-completers in October 2007; which represented 8.7 percent of the 37 million non-institutionalized, civilian youths in the U.S. at that time (Cataldi, et al., 2009). Those without a high school diploma often seek a rite of passage into employment, postsecondary institutions, or training programs via adult literacy programs.

Adult Literacy a Rite of Passage

As a rite of passage, only a small fraction of those eligible participate in adult literacy programs each year. For example, in a presentation to Congress, Keenan (2009), indicated only about 2.3 million adults (5.9% of non-completers) enroll in adult education programs: 45% enroll in English literacy programs; 41% in ABE (i.e., for reading and math below the 8th grade level); and only 14% in Adult Secondary Education (9th – 12th). When viewed by ethnic group: 44% of participants were Hispanics, 26% were White, 20% were African American, and 8% were Asian. Regarding the ages of participants, one third (i.e., 850,000) were between 16 – 24 years old.

Rite of Passage (Delayed?)

The adult literacy path to GED completion is paved with obstacles, particularly for students of color. Many learners who start, never complete the journey. The dropout rate among adult literacy students is unacceptably high. Although they tend to overcome a number of institutional, situational, and dispositional barriers to attend the classes; up to 74% dropout, many in the first 3 weeks (Quigley, 1997). Relying on students’ self-reported perspectives, the reasons for leaving the programs vary; however, among other factors, students have cited transportation, family issues, financial constraints, time demands, violence/safety issues, and others (Quigley, 1997). However, these perspectives cannot be verified via other data. There is no national or state level longitudinal data base on adult literacy students that links their participation from HS through adult literacy programs and among programs. Therefore, it is not possible to determine the longer term patterns of students’ participation behavior. Nor can our existing data tell us the extent to which the behaviors of students represent the same behaviors they exhibited in high
school or if they have adapted new patterns of behavior toward education. In addition, our data management systems cannot determine the extent to which students “stop-out” of adult literacy programs, how often they attempt to complete the same (or similar) programs, or if they completely give up on their efforts to attain an education. Nor can these systems provide information on the extent to which adult literacy programs which often differ in philosophical orientation (e.g., individualized classes vs. group or class-based instruction, employment-oriented vs. social change, and others) may be most successful (or least successful) with different types of students.

Research Results Regarding the Effectiveness of the GED

In contrast, to adult literacy data systems, the data-based system maintained by the GED Testing Service (GEDTS) has been increasingly linked to longitudinal data bases, thus allowing researchers to address some of the most important research, policy, and practice questions regarding the long-term benefits and liabilities of the GED. In an extensive review of the GED research literature, Tyler (2004) identified the following longitudinal data sets that have been linked to GEDTS data by researchers. 1) A data set constructed by the Social Security Administration in concert with the GEDTS and several state departments of education (Tyler et al., 2000). 2) The sophomore cohort of the High School and Beyond (HS&B) Survey (used by Murnane, Willett, and Tyler, 2000), included two cohorts from a nationally representative sample of high schools: the 1980 senior class, and the 1980 sophomore class. Both cohorts were surveyed every two years through 1986, and the 1980 sophomore class was also surveyed again in 1992. (National Center for Education Statistics, 2009a). 3) The National Longitudinal Survey of Youth (NCSY97) (employed by Murnane, Willett, & Boudett, 1999), consists of a nationally representative sample of approximately 9,000 youths who were 12 to 16 years old as of December 31, 1996. Youths continue to be interviewed on an annual basis (Bureau of Labor Statistics, 2009). 4) The National Education Longitudinal Study of 1988 (NEL88) (used by Berktold, Geis, & Kaufman, 1999) was initiated in 1988 with a cohort of eighth graders. These students were then surveyed again via four follow-ups in 1990, 1992, 1994, and 2000 (National Center for Education Statistics, 2009b). 5) The Survey of Income and Program Participation (SIPP) is a multistage-stratified sample of the U.S. civilian non-institutionalized population. It is a continuous series of national panels, since 1994, with sample sizes ranging from approximately 14,000 to 36,700 interviewed households (U.S. Census Bureau, 2006). It has been used to project a longer horizon regarding the postsecondary and training experiences of GED holders.

Demographics of Current U.S. GED Test Takers

Data from the GEDTS indicates in 2008, the average age of U.S. GED candidates was twenty-five years old. The average number of years out of school before testing was about eight years. The average age of those who passed the tests was 24 years. A total of 79 percent of the candidates were taking it for the first time, and 76 percent of them passed. Repeat candidates represented 21% of test takers. Of these, 50% of them passed the tests. Whites (52%) were much more likely than other race/ethnic groups to take advantage of the GED tests. Of the remaining test takers, only 23.75 were African Americans, 19.25 were Hispanics, 2.5% were American Indians, and 1.5% were Asians (GED Testing Program Statistical Report, 2008). Also, only about one out of one hundred non-completers pass the tests each year. For example, in 2008,
only about 1.9 percent of the high school non-completers took the tests; 1.6 percent completed all five tests, and 1.2 percent passed the tests.

**Realizing the Dream**

The data based longitudinal studies have provided significant insight into the nature of the GED and the benefits that would most likely accrue to those who complete the credential.

**What are the Economic Payoffs to a GED?**

A perpetual question regarding the economic benefits of the GED is whether or not GED recipients will earn higher wages than school non-completers who did not obtain the credential. Tyler et al. (2000) found that GED recipients earn ten to nineteen percent higher earnings than other similar school non-completers. However, these benefits accrue only to dropouts who leave school with low skills. Their data indicated the GED is an economically valuable credential for non-completers, but only for those who leave school with weak cognitive skills. Using data from the sophomore cohort of the HS&B survey, cognitive skills were measured using scores from a math achievement test that all the students took at that time. Low-skilled dropouts were those at the bottom quartile of the 10th grade score distribution. They concluded there is apparently no payoff for non-completers who leave high school with higher skills.

Tyler (2004) summarized the findings of nine studies which employed longitudinal designs and data sets, e.g., GEDTS and the Social Security Administration, High School and Beyond Survey, the National Longitudinal Survey of Youth, etc.) since 1997 to examine the economic returns to a GED. He concluded, recipients of the GED had a five percent greater chance than other non-completers of getting a full-time job, but HS graduates had a greater chance for employment (Boesel, 1998). Recipients of the GED had eight-to-ten percent higher earnings than foreign-schooled individuals who hold a regular HS diploma from their country of origin (Tyler, 2004). Another finding from the studies is that the economic payoffs for GED recipients take time to accrue. That is, after one year, the wages of low-skilled, male GED holders tend to increase about 1.5% over those of low-skilled uncredentialed non-completers. After five years, the wage difference is 6%, and statistically significant (Tyler, 2004).

Researchers have also tracked GED recipients into the military and compared their results with others. Boesel (1998) analyzed their performance in the military. In 1983, three year attrition rates were: 22% for HS graduates; 45% for GED recipients; and 52% for HS non-completers. As a consequence, the U.S. military implemented a three-tier educational classification system for recruits: 1st tier HS diploma holders; 2nd tier GED and other alternative degrees; and 3rd tier HS non-completers. From 35,000 to 40,000 GED recipients still enter one of the services each year.

One of the major reasons non-completers indicate they pursue a GED is to attend postsecondary education. This is a worthy goal. Using NLSY data, researchers have determined that each year of college results in a 10.8% hourly wage differential between GED holders and other school non-completers (Murnane, et al, 1999). In this same study, only 12% of GED holders completed at least one year of college, and 3% acquired at least an associate’s degree (Murnane, et al, 1999). Using data from the SIPP, Bauman and Ryan (2001) found that about thirty percent of GED recipients had some postsecondary education, but no degree, and 8% had a bachelor’s degree. In a different study, Boesel (1998) found that although their college grades were similar to those of H.S. graduates, GED recipients were statistically, less likely to complete
their college programs than H.S. graduates. Only 50% complete associate degrees; and 2% complete bachelor’s degrees (Boesel, 1998).

Researchers have also investigated the level of training success among GED recipients. For those who received a year of on-the-job training, there was a 44% hourly wage differential. Only 18% of male GED holders obtained any on-the-job training, and the median time was only 63 hours (Murnane, et al, 1999). The off-the-job training provided by government or school-based sources to male GED holders did not yield measurable effects on their wages. The median amount of training was 569 hours. However, female off-the-job training is associated with earning gains of $1,239 in each subsequent year, and an increase in the hours worked. The median training time was 527 hours (Boudett, 2000).

Ending the Nightmare: Our Role in Facilitating the Dream

A Framework for a National Evidence Based System

Researchers of the GED have the luxury of measuring the outcomes of the GED test credential via a highly systematized data-based system that allows the tracking of individuals from taking the tests, to their efforts in the military, employment, postsecondary, and training settings. The GED data-based system provides a model for the development of national evidence based system that has the potential to produce systematic data-based research results which can significantly inform practice decisions and increase the effectiveness, and efficiency of our programs and services, and thereby enhance the learning experiences of students. However, measures of inputs and the effectiveness of processes involved in adult literacy programs are much more difficult and complex to assess. The National Reporting System is a good start for adult literacy, but more such systems are needed and they should be linked.

Evidence based support for policies and practices can significantly enhance the learning experiences of students and increase the effectiveness, and efficiency of our programs and services. However, such a system requires, large scale experimentally designed and mixed methods research studies. Also, a national system of regional research centers and think tanks are needed to develop a pool of veteran researchers and train future researchers. Lastly, the field should seek to support teams of researchers who are committed to the long-term investigation of important questions and consistently informing policy makers and practitioners.

Conclusion

Because GED test-takers must provide social security numbers on their applications, researchers are now able to utilize longitudinal data-bases to track GED test takers and the effectiveness of the GED. Although significant long-term employment and wage benefits accrue to GED holders; far too few of them attend and complete college, especially a 4-year degree. While similar questions exist regarding the long-term personal and social benefits of adult literacy programs; the existing data systems do not allow for the effective integration and linking to existing data systems to facilitate research into the long-term effectiveness of adult literacy programs.
References


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