

Special Report

The Value of Obtaining a GED in Pennsylvania

Gary J. Dean

Introduction

Since the GED program was initiated in Pennsylvania in 1945, over 400,000 Pennsylvania adults have passed the GED exam. It is commonly assumed that obtaining a GED is good for both the individual and society, but little empirical evidence has been obtained to document this connection. The question remains: Are those who obtain a GED better off? To date only two other states have conducted large scale follow-up studies of their GED graduates: Iowa (State of Iowa, 1992) and Kentucky (Raisor, Gerber, Bucholtz, & McCreary, 1993). In addition, a handful of other studies have been instructive in identifying the benefits of the GED (Jantzen & Quigley, 1981; Miller, 1987). The study presented here was commissioned by the Office of GED Testing, Bureau of Adult Basic and Literacy Education, Pennsylvania Department of Education, to ascertain the value of obtaining a GED in Pennsylvania.

Purpose of the Study

The purpose of this study was to discover how GED graduates in Pennsylvania have progressed since they passed the GED. The basic questions which guided the research were:

Gary Dean is Associate Professor and Department Chair, Adult and Community Education, Indiana University of Pennsylvania. The author wishes to acknowledge Mary Ann Eisenreich, Director, Office of Community Education, Carlow College, who co-authored the proposal and co-directed this project; Terri Hubbell, who assisted in the research project; and Larry Goodwin, Director of the GED Testing Program in Pennsylvania who had the foresight to commission the study. This study was funded by Act 353, Project #098-6013.

- What were the high school experiences which led GED graduates to drop out of school?
- What are the employment characteristics of GED graduates in Pennsylvania?
- What are the income and living arrangements of GED graduates in Pennsylvania?
- How did the GED graduates prepare to take the GED?
- To what extent do GED graduates in Pennsylvania pursue further education?
- What are the overall benefits of obtaining a GED in Pennsylvania?

Methodology

The Questionnaire

The research project was conducted during the period from July, 1995, through August, 1996. During the summer and fall of 1995 the questionnaire used in this study was developed. The process of developing the questionnaire consisted of several steps. First, instruments used in other studies were reviewed. Of particular importance were the instruments used in the Iowa, Kentucky, and Saskatchewan studies (Jantzen & Quigley, 1981; Raisor, et al., 1993; and State of Iowa, 1992). The ideas from these instruments were combined with ideas from the GED Testing Office and the researchers. Drafts of the questionnaire were reviewed by other researchers, and, finally, the questionnaire was field tested with GED graduates in the Pittsburgh area. The completed survey questionnaire was ready to be mailed out in January, 1996.

The Sample

During this same time period the sample for the study was being selected. There are a total of 352,872 people who passed the GED in Pennsylvania for the twenty year period from 1975 to 1994. A total of 4,865 of these GED graduates were selected randomly. This random selection involved two processes. For GED graduates from 1982 through 1994, 300 graduates per year were selected randomly by computer program. Prior to 1982, GED records in Pennsylvania are not computerized, so GED graduates for this period were selected by hand from files maintained in the GED Testing Office.

The randomly selected GED graduates were then cross-checked with the Pennsylvania Department of Transportation for current drivers license

registrations. This allowed for the identification of current addresses for the study participants. This process resulted in a total of 3,099 matches, which became the sample for the study.

Response Rate

Two mailings which were sent out during the winter and spring of 1996 resulted in a total of 989 usable responses. Despite cross referencing with the Department of Transportation to obtain current addresses, there was a total of 626 undeliverable surveys. The adjusted response rate was 39.99% (989 responses divided by 2,473 delivered surveys). The sample of 989 GED graduates in this study was comprised of 518 women and 456 men. The average age of the participants in this study at the time they took the GED was 29.32 years of age; the average age for the women was 30.93 and for men was 27.49. The average age of the participants at the time they completed the questionnaire was 37.71; the average age for the women was 38.72 and for the men was 36.42. These and all statistics reported in this paper have been abstracted from *Commonwealth of Pennsylvania's GED Graduates' Progress: Final Report* (Dean & Eisenreich, 1996).

Response Bias

A very important issue in survey research is whether or not the responses to the survey actually represent the views of the entire population. In this case, the question is whether or not the responses of the 989 GED graduates who returned the questionnaire represented the views of the 352,872 GED people who graduated between 1975 and 1994 in Pennsylvania. To determine if this was so, a response bias study was conducted. A total of 200 people were selected randomly from the 1,484 GED graduates who did not return the questionnaire. A total of 49 (24.5%) of these 200 nonrespondents complied by returning a shortened version of the questionnaire. This shortened version allowed a comparison of the nonrespondent group to those who did respond to the survey. The resulting comparison indicated that the nonrespondents were not different from the respondents in most respects. The two groups were compared on the following demographic measures: age at the time they took the GED, their current age, the number of years of school completed prior to dropping out, gender, current employment status, and current level of income. All of these comparisons indicated that the nonrespondents were not different from the respondents with the exception of number of years of school completed prior to dropping out of school. In this case the

nonrespondents had slightly more school than the respondents (10.5 years versus 10.1 years respectively). This difference, although statistically significant, does not appear to have practical significance for interpreting the data.

Findings

The findings of the study are presented in five major sections: high school experiences of the GED graduates, employment characteristics, income and living arrangements, preparation for the GED, further education after the GED, and, benefits of obtaining a GED. It should be noted that the findings presented in this article are reported as descriptive statistics. In the final report of the research project (Dean & Eisenreich, 1996) the complete statistical analyses for these findings can be found. All comparisons (such as before and after the GED, between men and women, etc.) reported in this article have statistically significant differences. In order to focus on the importance of the findings and not get bogged down in statistics, the actual statistical tests of significance are not presented in this article.

High School Experiences

The participants in this study noted many reasons for not completing school. The GED graduates in this study completed an average of 10.09 years of school, with women completing 10.00 years of school and men completing 10.22 years of school. There were many reasons stated for leaving school (see Table 1). The highest ranked reason for leaving school was the global response of "disliked school." This can be interpreted as a general negative response to school. The next highest ranked item was "to get a job," with "not doing well in school" ranked close behind. The next highest ranked item was "family problems," and "treated poorly by teachers and administrators" was ranked next. All of these reasons contributed to why the respondents in this study did not complete high school.

When women were compared to men regarding the reasons they did not complete high school, it was discovered that they dropped out for different reasons. Women were more likely than men to drop out of school because of pregnancy or marriage. Men, on the other hand, were more likely than women to drop out of school to get a job and, because they were not doing well in school, were treated poorly by teachers or administrators, disliked school, and did not perceive school as challenging. All of these differences were statistically significant.

Table 1
Reasons for Not Completing School

Reason	Average Rank*
Disliked school	3.35
To get a job	2.94
Not doing well in school	2.89
Family problems	2.79
Treated poorly by teachers or administrators	2.58
School was not challenging	2.51
Pregnancy or marriage	2.42
Other	2.20
Problems with other students	1.91
Personal illness or injury	1.37
Illness or injury in the family	1.36

* Items were rated on a six-point scale with 1 = “not true for me” and 6 = “very true for me.”

The data regarding why the GED graduates did not complete high school can be difficult to interpret. It is helpful to understand that each person rated each item on a six-point scale so that each person could identify a combination of reasons that influenced him or her to drop out of high school.

Employment Characteristics

The question of how the GED graduates are doing in the job market was approached with a series of questions regarding their current and past employment. The general procedure was to ask the respondents to rate each item for the time period “before they took the GED” and “now” so that a comparison could be made regarding how their employment situation has changed since they passed the GED (see Table 2). It should be noted that there were positive changes for each category in Table 2, thereby indicating that the GED graduates are better off now in terms of employment than they were before they took the GED. More GED graduates are employed now than were employed before they took the GED (17.4% increase), and the number employed for more than 30 hours per week increased by 16.5%. The number who rated their jobs as highly skilled or very highly skilled increased by 37.2%, while the number indi-

cating they have a high or very high level of satisfaction with their jobs increased by 37.8%. In addition, the percent of those receiving job benefits increased by over 20% for each kind of benefit. The indication is clear that the GED graduates are better off now than they were before they took the GED test.

Table 2
Employment Benefits of Obtaining a GED

Employment Characteristic	Before GED	Now	Improvement
Employed for pay	60.2%	77.6%	17.4%
Employed more than 30 hours per week	66.8%	83.3%	16.5%
Highly or very highly skilled job	11.6%	48.8%	37.2%
Highly or very high job satisfaction	11.9%	49.7%	37.8%
Receive health insurance benefits	35.4%	55.6%	20.2%
Receive life insurance benefits	21.3%	41.7%	20.4%
Receive pension or retirement benefits	18.6%	40.1%	21.5%

This same analysis was completed for GED graduates from different time periods. The GED graduates in the sample were divided into five groups: group 1, those who obtained their GED between 1975 and 1982 (n=105); group 2, those who passed the GED between 1983 and 1985 (n=215); group 3, those who passed the GED between 1985 and 1988 (n=189); group 4, those who passed the GED between 1989 and 1991 (n=226); and group 5, those who passed the GED between 1992 and 1994 (n=253). The unemployment rates for each group are displayed in Table 3. It should be noted that the percent of those unemployed decreased from 3.9% to 10.9%. It was discovered that it did not matter when a person obtained their GED; that person was more likely to be employed after passing the GED than before.

Table 3
Unemployment Rates by When the GED was Passed

Date GED Was Passed	Percent Unemployed*		
	Before GED	Now	Decrease
1975-1982	28.7%	4.8%	3.9%
1983-1985	17.3%	6.4%	10.9%
1986-1988	14.0%	8.8%	5.2%
1989-1991	15.5%	8.3%	7.2%
1992-1994	18.6%	11.2%	7.4%

*Percents are based on responses to items in the questionnaire and cannot be compared to labor market statistics which compute unemployment rates on number of unemployment compensation claims filed and/or applications at Job Services Offices.

Income and Living Arrangements

In addition to improvement in employment status, GED graduates make more money now as compared to before they passed the GED (see Table 4). The number of people who earn over \$20,000 per year increased by 26.5% from before they took the GED to now. The same increase was also true regardless of when a person obtained the GED. The most dramatic increases were for those who obtained their GED between 1983 and 1985, with a 35.7% increase in the number of GED graduates earning more than \$20,000 per year. These findings indicate that those who earned their GEDs some time ago were more likely to experience an increase in income, due presumably at least in part to the longevity of their working careers. For those earning a GED more recently, the percent of increase is less dramatic but still substantial enough to indicate that the GED had a positive effect on income for all regardless of when they earned it.

Another important finding is that GED graduates reduced their dependency on others for financial support. Dependency on welfare, disability, and other government funds was reduced by 5.6% from before the GED to now, while GED graduates depending on the income of another household member was reduced by 7.7%. More GED graduates also own homes now than before they took the GED. The percentage of respondents who owned a home increased by 18.4%.

Table 4
Percent of GED Graduates Earning over \$20,000 per Year

	Before GED	Now	Improvement
1975-1982	11.0%	35.0%	24.0%
1983-1985	15.0%	50.7%	35.7%
1986-1988	14.7%	46.3%	31.6%
1989-1991	18.8%	38.2%	19.4%
1992-1994	19.3%	31.1%	11.8%
All Respondents	16.2%	42.7%	26.5%

Preparation to take the GED

The GED graduates in this study prepared to take the GED in a variety of ways. About half (57.6%) enrolled in formal Adult Basic Education (ABE) or GED preparation classes. More than half (61.8%) of the respondents studied from a book specifically designed to prepare them for the GED. In addition, more than one third (41.0%) took a GED practice test. A little less than one third (29.1%) studied with a family member or friend, while a smaller number (6.1%) worked with an individual tutor. These percents add up to more than 100 because a person may have used more than one method to prepare for the GED.

Those who enrolled in ABE or special GED preparation classes felt that the classes were very worthwhile. They rated the classes as beneficial for preparing for each part of the GED test. On a scale of one to six (where one = "not helpful" and six = "very helpful"), ABE/GED classes were rated 5.14 by all of the respondents (close to "very helpful") for passing the GED test. This is a very strong endorsement for the effectiveness of such classes.

In addition, respondents were asked to rate specific areas of the ABE/GED classes (see Table 5). Overwhelmingly, the teachers were rated the highest (5.19 on the same one to six scale). The books and materials were rated next as most helpful (5.06), and the times classes were held was also rated high (4.91). Overall, the general response was a strong endorsement for ABE/GED classes, especially for the teachers in those classes. In all of the above, the ratings of the women were compared to those of the men. The women consistently rated their experience in the ABE/GED classes higher than did the men.

Table 5
Helpfulness of ABE/GED Preparation Classes

	Rating*
The teachers	5.19
Overall helpfulness of the classes	5.19
The books and materials	5.06
Times classes were taught	4.91
Things that were taught	4.84
Places classes were held	4.47
The other students	3.45

* Items were rated on a six-point scale with 1 = “not true for me” and 6 = “very true for me.”

The GED graduates were also asked to indicate how many times they took the GED before passing all sections of it. Almost all of the respondents (91.7%) indicated that they passed the GED test the first time they took it.

Further Education After the GED

One of the more surprising and positive findings from this study was the number of people who pursued further education after passing the GED; 599 GED graduates out of the 989 respondents (60.5%) participated in some form of further education or training after obtaining the GED diploma. The 599 graduates participated in a total 812 different education or training programs (see Table 6). Of the total respondents, 22.7% enrolled in technical, non-degree training programs; 15.0% enrolled in two-year associate degree programs; 5.0% enrolled in four-year colleges or universities; 25.4% participated in on-the-job training; and 13.8% were involved in some other form of career-related education or training. This continued participation indicated that those who passed the GED have a strong commitment to lifelong learning.

The GED graduates not only pursued their own education but encouraged others to pursue their education as well. The GED graduates in this study encouraged an average of 2.23 people to enroll in ABE/GED preparation classes. In addition, they encouraged an average of 3.29 people to take the GED test.

Table 6
Further Education and Training After the GED

Type of Education/Training	Number	Percent*
Technical, non-degree training program	225	22.7%
Two-year associate degree	149	15.0%
Four-year college or university	50	5.0%
On-the-job training	252	25.4%
Other training	136	13.7%

*Percent of total (n = 989).

Benefits of Obtaining a GED

The respondents rated a number of benefits of obtaining a GED in Pennsylvania (see Table 7). It is clear from these data that the single most important benefit that GED graduates obtained was that they felt better about themselves. This is borne out by the many comments written on the surveys, some of which have been included below. In addition to improving self-esteem, the respondents indicated that they felt better about life in general and that they were able to encourage their children to finish school. The message from this study is quite clear: the GED does not only enable one to get a better job, but the personal benefits for self-esteem and family outweigh the importance of the job and economic benefits.

When the responses of women were compared to those of the men in the study, the women rated most of the benefits higher than did the men. Women rated the following benefits of obtaining a GED higher than men: keeping a job, getting a job, increasing income, performing better on a job, helping children with school work, encouraging children to finish school, enrolling in additional school, becoming more involved in the community, increasing self-esteem, and improving economic security and life in general. In general, the women believed more strongly than did the men in the positive outcomes of passing the GED test.

Conclusions

The findings of this study are very supportive of the GED program. Those who have passed the GED state that it has contributed positively to

Table 7
Benefits of Obtaining a GED

Benefits	Rating*
Feel better about yourself	5.17
Improve your life in general	4.35
Encourage your children to finish school	3.93
Be more economically secure	3.71
Get a better job	3.66
Enroll in additional schooling	3.64
Increase your income	3.54
Perform better in your job	3.22
Keep a job	3.19
Help your children with their school work	2.91
Become more involved in your community	2.62

* Items were rated on a six-point scale with 1 = "not true for me" and 6 = "very true for me."

their economic as well as their personal well-being. Positive outcomes were noted in all areas surveyed. Perhaps much more powerful than the statistics are the many comments written by the respondents on the surveys. Following are just a few selected comments. One respondent stated, "It seemed that I never finished anything that I started, until I started night school for my GED. This is now one of the many things that I am very proud of achieving." A 1991 GED graduate said, "Quitting school was one of the saddest things I ever had to do," and a 1984 graduate stated, "When I was young I was involved in crime and drugs. . . . When I started taking drugs I thought I could not accomplish anything. When I passed the GED test the first time I took it, I found out I could do anything I put my mind to." A 1987 graduate summed up the career benefits this way: "Passing the GED was just the first step in improving my life. . . . I truly believe earning my GED gave me the confidence to believe I could be anything I wanted to be." Another person summed up the benefits this way: "I went from a very low pay job of \$7.25 per hour to \$16.54 per hour. I work full time for the federal government. Great program." Of the preparation classes one respondent said, "The GED teachers were very kind and helpful. They made things so easy and clear." It is clear from both the statistics and the comments of the respondents

that passing the GED has many benefits. Increased opportunities for employment, further education, and enhanced self-esteem are but three of the many benefits.

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