

Post-School Training of Young Adults

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In this study the training of young adults after their high school experience is analyzed. Using data from a national longitudinal survey, the amount of training and the type of training they receive are reviewed. Different family background characteristics and school outcome information are also used in the analysis.

Keywords: Training, Young Adults, Career

During the last decade, the adequacy of the labor and academic skills youth bring to the world of work after their high school experience has been debated. Business leaders and policy makers alike have expressed their concerns about those youth lacking the skills necessary to perform in the workplace. And both businesses and government agencies have emphasized the need of continuous training of the workforce to become competitive and to succeed. Many initiatives have been undertaken, including the school reform of the 1990s aimed at changing the way work and academic skills are taught and connected for a meaningful accomplishment of both students and the companies they later work for. At the beginning of the new millennium little is known about the extent and depth of the training young adults enroll in after their high school experience.

Workforce Education and Training

Training of young adults is considered important in many ways. As in the case of adults, it enhances skills and productivity, and thus increases wages (Becker, 1993), preparing them to the challenges posed by a changing economy. This is crucial if we consider that in average, during their first ten years in the labor force individuals work for approximately eight employers (Veum, 1993). Training of young adults, those who graduated from high school or those who have dropped out of school, has become more noticeable in recent years in part because of the perceived gap between workforce skills and expanding workplace demand, and lower academic achievement.

The need for more appropriate skills in order for youth to work, and help the US economy compete globally, led to many policy changes and initiatives. For example, one of such initiatives identified the skills necessary for work (SCANS Commission, 1991). Institutions like the National Center on Education and the Economy proposed a “high-wage” strategy system that was based on a restructured education, employment and training system (National Center on Education and the Economy, 1990).

But by far the most important policy initiative was the school reform that took place throughout the 1990’s, emphasizing a different approach to education for work and to foster the American workforce. The school reform was embodied in three components of federal legislation—the Carl D. Perkins Vocational and Applied Technology Education Act of 1990 or *Perkins II* (Public Law, 101-392), the School-to-Work Opportunities Act of 1994 or *STWOA* (Public Law, 103-239), and the Carl D. Perkins Vocational and Technical Education Act of 1998 or *Perkins III* (Public Law 105-332). Even though the reform targeted all students, of importance here is the impact it had in the overall preparation of high students for work. Students were supposedly taught the new skills for the workplace through the implementation of programs, courses and systems designed by the school reform legislation.

Data show that the number of participating students in career and technical education (CTE) or vocational education has decline. According to Delci and Stern (1999), 5% of those students participated in CTE, which is a proportion close to the 6.6% reported by Stone and Aliaga (forthcoming). Roey et al. (2001) indicated 4.4% of students participated in CTE, and Plank (2001) reported 18.3% in the CTE. As important as keeping those participation levels, several studies have pointed out to the outcomes of the application of the reform—at least initially, and in particular regarding CTE concentrators.

However, the question remains about the amount and type of training those youth, including those that participated in CTE during high school, enrolled in after graduating from high school. A recent report from the National Center for Educational Statistics (Kleiner, Carver, Hagedorn, & Chapman, 2005) indicates that overall 40% of adults in the nation participate in some type of formal education for work-related reasons over a 12-month period, which reveals a high commitment to improve their level of knowledge and skills.

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The Links between School Education for Work and Post-School Training: Theoretical Framework

If the impact of the reform has been widely analyzed on academic achievement, less literature is available about the work skills students have learned while in school and their post-school training experience.

Studies about young adults post-school training have concentrated mainly in the gains in salaries experienced by those young people once they have concluded school. Hill (1995) documented how older women would considerably increase their salary after attending some training. A report by Eck (1993) indicated that for all education groups, earnings are higher in jobs that generally require qualifying training or jobs in which training is taken to improve skills. Marcotte (1999) studied the value of training over the course of three decades, and concluded that certain types of training pay off well for workers with and without a postsecondary education, but the economic returns were not stable over the 30-year period. More generally, higher wages are related to higher levels of educational achievement as well as training—the examination of this issue led to the origin of the human capital theory (Becker, 1993).

A problem that has been identified in the young adults post-school training literature is the lack of appropriate data, particularly those related to actual investments in training. Yet, many studies have used national surveys that provide important data in this area. For example, Veum (1993) used the National Longitudinal Survey of Youth 1979, which he considered to be a comprehensive data. Hight (1998) used data from the 1991 National Household Education Survey, which is used to address a wide range of education-related issues.

The area that relates school work education with the post-school training experience has not been sufficiently studied. Therefore, the purpose of this paper is to report on the training experience of those youth, principally after they have ceased attending school (Hill, 1995)—due to high school graduation. The focus will be on some of the training characteristics—not in earnings.

In doing so, we want to also initially explore a set of family and school background characteristics that may help provide a better understanding of the training trends of young adults. For this purpose, this paper examines two areas—the amount of training programs attended, and the type of training programs they enrolled in.

Problem Statement and Research Question

As indicated above, there is an increasing interest in post-school training, but very little attempt has been made to link post-school training with the type of education for work that students receive during high school. The research problem is identified as the lack of knowledge, based on recent data, of post-school training of young adults. Knowing what young adults do in terms of training will help organizations and governmental agencies take the measures to ensure the proper training.

The overall research question is “What do we know about young adults post-school training?” Specifically, this paper will address the following questions:

- What is the amount of training programs young adults participate in after their high school experience?
- What are the types of training programs attended by young adults?

Data and Method

In this descriptive study we used data from the National Longitudinal Survey of Youth 1997 (NLSY97). The NLSY97 is a database consisting of a nationally representative sample of approximately 9,000 youths who were 12 to 16 years old as of December 31, 1996 (Bureau of Labor Statistics 2003a). One of its most important features is that it was designed to document the youths’ transition from school to work and into adulthood.

Up to date, the NLSY97 consists of seven rounds of interviews. In this study we used data from all seven rounds of interviews conducted between 1997 and 2003 (Bureau of Labor Statistics, 2003b). For analyses in Tables 1 and 2 we weighted the observations, following the Bureau of Labor Statistics (BLS) guidelines, to estimate population parameters (Bureau of Labor Statistics, 2003b) and to control for the survey oversampling. The weighted sample enables estimation of the number of individuals represented by each respondent.

The survey was administered through personal interviews with the youths and gathered extensive information on their education and training, among other variables. Youths who had attended the 9th grade or higher were asked a number of questions about their participation in school programs, including what curriculum concentration they believed best described their high school experience and the extent to which they participated in post-school training programs (PSTP).

The survey reported answers to three sets of questions relevant for our analyses. First, we used socioeconomic and demographic information provided for each participant. Second, school indicators were included in the analyses: curriculum participation (general, academic, CTE and dual), 8th grade GPA, and enrollment status. The third set of variables related to the post-school training programs attended. The assumption here is that by then youth have taken a decision about continuing their education or work as primary roles. For training total figures we combined programs attended.

The analyses conducted in this study is however limited to those respondents that have successfully completed high school—that is, this excludes those that dropped out of school. We did this in order to have a more uniform set of responses and to be able to use some variables that otherwise would not be available (e.g., high school GPA).

Also, since the emphasis of this study is on young adults and their early training experience after completing high school, we tracked the amount and type of training for their first, second and their year after high school. They might or might not have been enrolled in postsecondary education, and we did not distinguish either if they were working full time or part time. In terms of the type of training program they enrolled in, we restricted our analysis to the first program.

Findings

Total Post-School Training Participation and Young Adults Characteristics

The first issue we explored was the amount of training programs young adults have attended in their first, second and third year after graduating from high school. The NLSY97 database provides information of up to seven training programs youth may have attended—although the number varies in each reported year. In this part of the analysis, we explored the relationship between the family background and school characteristics and the amount of training attended.

Table 1 shows results for the average training programs in the first three years—for each year as well as the average for the three years. While there seems to be a proportional distribution of females and males in the average number of training programs attended in the first year, there is a rebound for the males only in the third year. Race also appears to be a factor in attending these programs. Black youth had considerable more training during their first year, and both black and white respondents in the study show a declining trend as time passes by. Hispanics, on the other hand, show a steady trend over the three year period, having an average of training programs attended that lies between that of black and white respondents.

We used parent education as a proxy for socioeconomic status. In this analysis, respondents to the survey whose parent or parents had attended some college will enroll in average in more training programs during the first year, followed by those that only completed high school. Those whose parents did not complete high school or attended four or more years of college had attended less training programs in average the first year. While there is little variation over the years for the four categories of parent education, those youth with parents with some college education experienced however a rebound in their average of training programs in the third year—1.22 from 1.39 in the first year.

When examined by the community location they belonged to at the beginning of the longitudinal survey (1997), those that indicated they lived in an urban location had more training during their first year. They were followed by those living in the rural areas. Those respondents from the suburban areas had less training during the first year. While for both the urban and rural respondents there is a decline in the average number of training programs they attended in the second year, there is an important rebound for both during the third year. That however is not the same for respondents in the suburban area, who showed a plain declining trend in the course of the three years.

Data for participation in training programs and the relationship with the curriculum concentration respondents belonged to while in high school is puzzling. First, those that received an education for work attended more training programs during the first year. Youth who indicated they were either a CTE or a dual concentrator (enrolled in both a CTE program of study and an academic one) attended an average of one-and-a-half training programs the first year they were out of high school. Second, they were closely followed by those in the academic training. And those in the general training attended less training programs than anybody else. Third, the CTE, dual and academic concentrators showed a declining trend over the years in terms of training programs attended. That was not the case for those in the general track, who reported an important increase in the third year.

Table 1. *Summary of Total Training Programs Attended (Average)*

	<i>First Year</i>	<i>Second Year</i>	<i>Third Year</i>	<i>Average</i>
Gender				
Female	1.24	1.01	1.05	1.10
Male	1.23	1.08	1.15	1.15
Race				
Black	1.39	1.05	1.09	1.18
White	1.19	1.05	1.08	1.11
Ethnicity				
Hispanic	1.15	1.12	1.16	1.14
Parent Education				
Less than 12th grade	1.05	1.04	1.07	1.05
High school graduate	1.29	1.02	1.07	1.13
Some college	1.37	1.06	1.22	1.22
College (4 years or more)	1.05	1.10	1.05	1.07
Community Location				
Urban	1.35	1.01	1.18	1.18
Rural	1.29	0.00	1.14	1.22
Suburban	1.17	1.09	1.06	1.11
Curriculum Concentration				
CTE	1.48	1.03	0.00	1.26
General	1.08	1.09	1.14	1.10
Dual	1.43	0.00	1.08	1.26
Academic	1.36	1.04	1.09	1.16
High school GPA				
1.5	1.25	0.00	1.07	1.16
2.0	1.15	0.00	0.00	1.15
2.5	1.21	1.06	1.22	1.16
3.0	1.24	1.02	1.11	1.12
3.5	1.34	1.14	1.08	1.19
4.0	1.13	0.00	0.00	1.13

Table 2. *Summary of Training Type Programs (Percentages)*

	First Year	Second Year	Third Year
Vocational	32.70	21.16	14.85
Work-related	15.23	17.40	28.66
Postsecondary vocational	2.24	2.35	1.31
Skills	11.48	11.02	6.40
Other	10.32	4.96	4.32

Vocational: Includes business or secretarial, vocational technical or trade, and apprenticeships

Work-related: Includes OJT, company training outside company, seminar or training outside company

Post-secondary vocational: Includes nursing school, and community or junior college

Skills: Includes government training, and job-search skills

Other: Includes vocational rehabilitation, correspondence course, school-based and ROTC, and other

Finally, data on participation in training programs indicate youth that had a cumulative high school GPA between 3 and 3.5 were the ones that had more training the first year they were out of high school. Interestingly, they were followed by those with the lowest GPA. Also, youth with the highest GPA were enrolled in less training programs during their first year after completing high school. Those with GPA between 2.5 and 3.5 showed an important increased number during their third year—the other groups had a straight declining trend.

Types of Post-School Training

We next analyzed participation in training programs according to the type of program youth attended during their first three years after completing high school. Results are provided in Table 2. For this analysis, we have grouped the programs according to five categories. Those programs are listed in the NLSY97 adataset:

- Vocational training, which includes business or secretarial training, vocational technical or trade, and apprenticeships
- Work-related, including on-the-job training, job-related training provided outside the organization, and seminar or training outside of the company
- Postsecondary vocational education, including nursing school, and community or junior college
- Skills training, comprised of government training, and job search skills, and
- Other, which includes a general “other” category, as well as vocational rehabilitation, correspondence course, and school-based and ROTC.

Analysis was performed for years 1998 through 2003, since in 1997 there was a minimum number of participants that made the analysis negligible. Also, data for each year has been grouped for all respondents included—those that reported being out of school for the first, second, and third years.

As it can be seen in Table 2, by large the two major categories, where people participated more are the vocational training and the work-related training. About of a third of respondents in the first year out of high school enrolled in vocational training programs. Every year of the survey the emphasis has been in training in this category. Also, participation in vocational training substantially declines over the three-year period.

On the other hand, work-related training increases participation over the three-year period. In fact, it goes from 15.23% up to 28.66% in the third year. The increase is substantial, too and reaches about one third of all participants.

The third category with the largest participation is that of skills, with a little over 11% participation during the first year—and down to 6% in the third year. This is an important category, because is largely formed by government training consistently over the three-year period.

The last category in terms of participation is postsecondary vocational. In this case, participation refers to obtaining a 2-year college degree.

Discussion and Conclusions

The purpose of this paper was to report on the extent and depth of training programs in which young adults are enrolling after they conclude high school. Our objective was to have a better idea of how participation in training programs was in terms of the average number of programs, and the type of programs they attended.

One consistent issue reported in the findings is that most of youth included in the survey appears to have been enrolled in one form or another of training. It is yet to be explored whether that participation in mandated, or required or needed in order to succeed in the workplace. It is also important to note that in many categories training extends sufficiently enough beyond the first year, which again could be construed as a permanent quest for knowledge and skills.

With regards to the characteristics of youth participating in training programs, socioeconomic characteristics indicated that there are differences based on race and income, as well as high school experience. Although further analysis is needed to understand these relationships, initial findings in this study suggest there is a combination of family background characteristics—also reflected in school outcome characteristics—that may indicate who and why enrolls in those programs. The fact that people with lower socioeconomic status do not participate in training programs as much as one could assume may be an artifact of less knowledge about the potential and benefits derived from training. If that indicator is compound with the fact that urban youth and those with lower GPA get enrolled in more training programs we see a patten described anywhere else in the educational, sociological, labor and economic literature about the relationship between socioeconomic status, educational achievement and longlife earnings. One intriguing finding—yet not surprising—is the fact that youth that enrolled in the academic or college preparatory track while in high school reported participation in more than one training programs. Maybe the explanation here is that they enrolled in job-specific rather than general skills training. The fact that their participation in training declines after the first year may support that idea—which is in open contrast of, for example, those enrolled in the general concentration, which reported little enrollment in training in the first year and more in the third year.

Participation in training according to the type of training is rather interesting. Again, due to the initial nature of this study no further conclusions can be drawn from the data analyzed, but some points are worth to highlight. Obviously the most important is that of increasing participation in work-related training over the course of the years. That is consistent with employment in an organization—especially is training is provided by the employer. Another issue that is clear is the limited participation in vocational training after the first year. Since respondents in the study were asked specifically about specific programs that may end up in certificates and other credentials, it may well explain the declining participation. A similar argument can be used for postsecondary education—and the granting of 2-year college degrees. In the case of skills, and given that the bulk of the category resides in training provided by the government, it is not surprise that participation in this category declines over time.

The current study, while descriptive in nature aimed at understanding the current condition of training of young adults. It has been noted above that there is a lack of more detailed information about training for those that are leaving high school. This study attempts to fill that gap. More research is still needed and more elaborate statistical analysis is needed, but as stated at the beginning and throughout the paper, the intent was to provide some information in that area.

Relevance for HRD

As HRD professionals continue to explore better ways to training and OD, the first issues is that knowledge about the type of skills and training experiences of youth are particularly important. Second, if HRD professionals are to participate in the decision-making process and the design of policies, these issues bring a better opportunity to address them in a more efficient way.

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