

POLICY ANALYSIS SERIES

SUPPORTED EMPLOYMENT: REVIEW OF GRANT RECIPIENTS AND 1986 DAC DATA

NO. 27

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I. INTRODUCTION

Since the late 1970s, employment options for persons with developmental disabilities have been viewed as realistic when supported by parents, providers, and government agencies (Wehman, 1981). Before that, individuals with disabilities were viewed as having limited abilities to perform work and, thus, were referred to sheltered workshops or other day programs.

Indeed, there have been and continue to be many barriers on the road to sustained supported employment for persons with disabilities. These include the lack of parental support, poor funding, services that are tailored to buildings rather than settings, and the potential loss of social security benefits (Castellani, 1987), to name a few. Despite these and other barriers, supported employment has gained momentum.

In 1984, the Minnesota Governor's Planning Council on Developmental Disabilities (GPCDD) decided to make supported employment a priority and allocated funding for community-based vocational options. For the next three years, 1984 through 1986, the GPCDD gave supported employment projects priority in the distribution of grant funds. The purpose of this paper is twofold: first, to report the results of these efforts as measured by data collection at the end of the three-year period; and second, to report the results of community-based vocational activities provided by Minnesota day training and habilitation centers in 1986.

A companion paper to this one, Policy Analysis Paper No. 26 describes some of the definitions given for supported employment as well as some of the barriers. For more information about services in day training and habilitation centers, the reader is referred to Policy Analysis Papers No. 6, 7, 8, 9, 17, 23, and 25. Policy Analysis Paper No. 25 presents a summary of results of services in day training and habilitation centers for 1986, including demographic and financial results.

II. METHODOLOGY

In 1984, 1985, and 1986, the GPCDD distributed requests for proposals (RFPs) to cover the priority area of supported employment. The purpose of these grants was to educate providers, parents, and others about supported employment, as well as to establish supported employment positions for persons with developmental disabilities. In 1984, there were five grants awarded with 113 persons placed into community-based jobs. In 1985, the number of grants increased to nine with 266 people being placed. The number of grants increased to 12 in 1986, with 469 placed in community-based work.

In April 1987, a training and habilitation services survey was sent to 96 providers of adult services throughout the state of Minnesota. The purpose of the survey was to gather basic demographic, vocational, and summary financial information. This was the first year in which data was collected specifically on individual participants rather than summarized for a program.

The surveys were returned during the summer of 1987. Data were edited for accuracy and entered into a computer for tabulation and statistical analysis. Of the 96 programs, 78 (81 percent) returned completed surveys. These programs provided information on 3,783 persons, of which 799 were involved in community-based employment. The remaining 18 programs served 1,100 persons and provided only agencywide summary data. Results collected on the 3,783 persons were for vocational activities engaged in during the fourth quarter of 1986.

The grant recipients included four programs (74 participants) that were also included in the survey of day training and habilitation centers. For purposes of this study, no attempts were made to eliminate duplication of results. Much of the grant recipient information was summary information and was not as detailed as the survey information.

III. DEFINITION OF TERMINOLOGY

A number of key terms need to be defined for the purpose of this

study. They included supported employment, community-based employment, integration, productivity, and independence.

Supported employment is defined as work performed in settings outside of traditional day programs for persons with developmental disabilities; completed with the assistance and/or support of a third party; and with the opportunity for integration (i.e., work with eight or less persons with disabilities and at least one other person who is not disabled). The federal definition for supported employment adds the further stipulation that this work must average at least 20 hours per week.

Community-based employment is similar to the definition outlined for supported employment. The difference is that no allowance is made for integration, but integration continues to be a goal nonetheless. The backbone of the definition for community-based employment is that this work is done in community settings (e.g., theaters, restaurants, parks, and nurseries) where integration may occur. In addition, wages may be substantially higher than incenter wages. Unless otherwise noted, the term "community-based employment" will be used for work performed outside of traditional day settings.

Integration is defined as placing individuals with developmental disabilities into settings where they may work besides or encounter persons without disabilities. It implies that persons with disabilities are not grouped (larger than eight) as to warrant isolation from the general public. The definition does not assume social integration in which persons with disabilities establish friendships and other social contacts with persons without disabilities.

Productivity is defined as the development and fostering of skills necessary to engage in vocational activities with minor assistance from support staff. In the day training and habilitation survey, productivity was measured by changes in support staff time over the course of the quarter. Other possible measures include increases in wages or hours worked.

Independence is defined as the ability to make significant achievements in skills which enable many aspects of one's life to be self determined. No one measure was used in the survey to gauge levels of independence. Since there is a correlation between productivity and independence in the development of skills, these variables were combined for discussion purposes within this study.

IV. RESULTS

The focus of this study centered around ten research questions. The results of these questions are provided below.

Question 1: Which persons are most likely to be involved in community-based vocational activities?

Generally speaking, persons with higher levels of functioning and fewer additional disabilities were found to work in community-based vocational activities. Persons with lower levels of functioning tended not to participate in vocational activities or worked less than ten hours per week. The grant recipients and persons surveyed from day training and habilitation centers were divided into three groups: those who did not work (786); those who worked less than ten hours per week in the community or in incenter programs (2,855); and those who worked more than ten hours per week (543). Table 1 shows each of these groups by level of functioning. For persons who did not work, 61.4 percent were severely or profoundly mentally retarded. For persons who worked more than ten hours per week, 81 percent were mildly or moderately retarded.

Table 1
 Number and Percentage of Persons with Developmental Disabilities Employed in Community-Based Vocational Activities: By Level of Functioning

LEVEL OF FUNCTIONING	TOTAL NUMBER NOT WORKING		WORKING LESS THAN 10 HOURS PER WEEK		WORKING 10 HOURS OR MORE PER WEEK	
	Number	Percent	Number	Percent	Number	Percent
Not mentally retarded	15	1.9%	54	1.9%	5	0.9%
Mild	116	14.8	814	28.5	285	52.5
Moderate	94	12.0	745	26.1	155	28.5
Profound	262	33.3	932	32.6	85	15.7
Severe	221	28.1	297	10.4	13	2.4
Unknown/undetermined	78	9.9	13	0.5	0	0.0
TOTAL	786	100.0%	2,855	100.0%	543	100.0%

Source: Minnesota DAC Survey and Council Grant Recipients, 1986.

filling the federal standards for supported employment.

Question 3: What are the average hours worked, the average hourly wage, and the degree of supervision?

The average hours worked per week for persons who worked less than 10.0 hours per week was 2.8. The range was from zero to 9.9 hours. The average hours worked per week for those persons who worked more than 10.0 hours per week was 17.6. The range was from 10 to 40 hours. For grant recipients, the average hours worked per week was 23.9.

The average hourly wage also showed similar results in terms of steady increases across groups. The group of persons who worked less than 10 hours per week received an average hourly wage of \$1.90, with a range of zero to \$4.55. Persons who worked more

than 10 hours per week received an average hourly wage of \$2.46, with a range of \$0.29 to \$5.05. The grant recipients had an average hourly wage of \$3.07, with a range of \$0.49 to \$5.36.

For many persons working in community-based vocational activities, a degree of supervision may be necessary to complete required tasks. A series of questions were asked regarding supervision of persons in community-based vocational activities. Supervision is defined as the amount of job coaching or other personnel time to assist, train, and generally oversee a person's work. A supervision ratio can be established based on hours of supervision divided by hours worked.

For persons who worked less than ten hours per week, the average amount of supervision was 45 minutes for each hour worked. For the group of persons who worked ten hours or more per week, the average amount of supervision was 30 minutes. Data on supervision were not available from the grant recipients. There was no effort made to discern the amount of overlap in supervision among persons with the same job coach or other personnel.

Question 4: Are persons working in community-based activities becoming integrated into settings where they come in contact and work beside persons who are not disabled?

Integration is one of the primary goals of having persons with developmental disabilities participate in community-based vocational employment. There is a dual response to integration: first, being in contact with persons who are not disabled; and second, not being in a large group of persons with disabilities which take away from the intent of community-based work. For persons working less than ten hours per week, 63.6 percent worked in integrated settings. This means that 239 persons either worked in a group setting with nine or more persons with disabilities or did not come in contact with at least one other person without disabilities. For persons who worked more than ten hours per week, 88.7 percent worked in integrated settings. The primary reason individuals did not work in integrated settings was that they did not work with or work besides people without disabilities.

For grant recipients there was no formal collection of information about integration. However, the grant recipients did indicate that the vocational activities occurred in community settings such as public schools, offices, and hotels. For integration to occur, it must take place in settings where persons without disabilities and persons with disabilities can interact and socialize.

Another possible way to measure growth in independence and productivity was to examine those persons who showed a decline in the amount of supervision. There were 82 persons who fit into this category and who worked an average of 10.8 hours per week and received an average hourly wage of \$2.35. At the beginning of their activities, these persons received an average of 37 minutes of supervision for each hour worked. With the development of skills, these persons showed a decline of 14 minutes per hour in supervision.

The most common type of activity these persons participated in was general cleaning or janitorial (40.5 percent). This was followed by outdoor yard work (13.8 percent), restaurant/fast food service (12.9 percent), and hotel/motel cleaning (10.3 percent).

**Question 6: What type of work do persons most often perform?
Is there a difference in wages earned and hours worked?**

Of the 799 persons who worked in community-based vocational activities during the fourth quarter of 1986, 422 persons (52.8 percent) worked in general cleaning or janitorial activities. Table 2 shows the number and percentage of people by different activities and by average hours worked per week. Note that people worked in more than one activity. As can be seen from Table 2, the two most common activities performed were cleaning and outdoor seasonal work. There is, however, a dramatic shift when the population is divided by average hours worked per

week. For those persons who work less than ten hours per week (657 persons) the most common activities were cleaning and/or outdoor seasonal work for 83.8 percent of the people. There was a shift in activities for persons working more than ten hours per week. The most common activity for these individuals was restaurant/fast food services followed by cleaning/ janitorial and motel/hotel cleaning activities.

Table 2
 Number and Percentage of Persons with
 Developmental Disabilities Employed
 in Community-Based Vocational Activities:
 Total and Average Hours Worked per Week

COMMUNITY-BASED VOCATIONAL ACTIVITIES	TOTAL		LESS THAN 10 HOURS PER WEEK		MORE THAN 10 HOURS PER WEEK	
	Number	Percent ^a	Number	Percent ^b	Number	Percent ^c
General cleaning/ custodial/janitorial	422	52.8%	382	58.1%	40	28.2%
Motel/hotel room cleaning	29	3.6	9	1.4	20	14.1
Manufacturing/light assembly	56	7.0	47	7.2	9	6.3
Restaurant/fast food services	96	12.0	44	6.7	52	36.6
Warehouse packaging	21	2.6	16	2.4	5	3.5
Outdoor yard work/snow shoveling/cleanup	176	22.0	169	25.7	7	4.9
Department store sales/ merchandise handler	3	0.4	2	0.3	1	0.7
Home cleaning services	71	8.9	69	10.5	2	1.4
Recycling services	23	2.9	19	2.9	4	2.8
Other	<u>146</u>	<u>18.3</u>	<u>116</u>	<u>17.7</u>	<u>30</u>	<u>21.1</u>
TOTAL UNDUPLICATED COUNT	799	100.0%	657	100.0%	142	100.0%

Source: Minnesota DAC Survey, 1986.

^aThese figures are the percentage of 799 adults participating in given vocational activity.

^bThese figures are the percentage of 657 adults participating in given vocational activity.

^cThese figures are the percentage of 142 adults participating in given vocational activity.

The information collected from grant recipients indicated a similar pattern in terms of vocational activities. Table 3 displays the number of persons by job titles. The table indicates that the two primary job titles included janitorial/custodial cleaning crews and restaurant/kitchen assistance.

Table 3
Number of Persons with Developmental Disabilities
Employed in Community-Based
Vocational Activities by Job Title^a

Job Title	Number	Percent
Maintenance/janitorial/ custodian cleaning crew	80	49.1%
Kitchen help/dishwasher/ busing/attendant	37	22.7%
Room attendant	10	6.1%
Manufacturing/assembly	8	4.9%
Lawn service/garden/nursery	7	4.3%
Packaging	6	3.7%
Carrier/delivery	6	3.7%
Clerical/copying/recordkeeping	3	1.8%
Other	6	3.7%

Source: Minnesota Developmental Disabilities Grant Recipients, 1986.

^aJob titles available for only 163 of 491 persons placed into community-based vocational activities.

The differences in wages and hours worked was due to many factors. Generally, persons who worked fewer hours and/or persons who had a lower level of functioning earned a lower average hourly wage. Table 4 shows average hours worked per week and average hourly wages by different activities and by splitting the population into two groups based on hours per week. The results show that persons who worked in restaurant/fast food services earned the highest average hourly wage (\$2.62). Persons who worked in motel/hotel cleaning worked the most hours per week (17.6). By splitting the population into two groups based on average hours worked per week, the results show a

slight decline in wages for persons who worked less than ten hours per week. For persons who worked more than ten hours per week, the three primary activity areas in which they worked, there wages were equivalent.

Table 4
 Average Hours Worked Per Week and Average Hourly Wage of Persons with Developmental Disabilities Employed in Community-Based Vocational Activities

TYPE OF COMMUNITY-BASED VOCATIONAL ACTIVITY	TOTAL AVERAGE		WORKING LESS THAN 10 HOURS PER WEEK		WORKING 10 OR MORE HOURS PER WEEK	
	Number of Hours	Hourly Wage	Average Number of Hours	Average Hourly Wage	Average Number of Hours	Average Hourly Wage
General cleaning/custodial/janitorial	4.2	\$ 2.04	2.7	\$1.98	18.5	\$2.66
Motel/hotel room cleaning	17.6	\$ 2.39	6.9	\$1.88	22.5	\$2.60
Manufacturing/light assembly	5.2	\$ 1.12	2.9	\$1.10	17.2	\$1.18
Restaurant/fast food services	11.4	\$ 2.62	5.4	\$2.61	16.6	\$2.65
Warehouse packaging	5.2	\$ 1.81	3.5	\$1.81	10.6	-- ^a
Outdoor yard work/snow shoveling/cleanup	3.1	\$ 1.84	2.6	\$1.83	13.4	\$2.13
Department store sales/merchandise handler	8.4	\$ 3.00	4.6	\$3.35	16.1	\$2.31
Home cleaning services	3.8	\$ 2.05	3.6	\$2.06	11.3	\$1.77
Recycling services	4.5	\$ 1.38	4.0	\$1.77	13.8	\$1.75
Other	6.3	\$ 1.98	3.0	\$1.88	19.0	\$2.36

Source: Minnesota DAC Survey, 1986.

^aNo data available on average hourly wage due to only one person in activity.

The differences in average hourly wage by level of functioning are outlined in Table 5. It shows that persons who had a lower level of functioning receive lower wages. This is consistent when dividing the population by hours worked per week.

Table 5
 Average Hourly Wage Earned by Persons with Developmental
 Disabilities Employed in Community-Based Vocational
 Activities By Level of Functioning

Level of Functioning	Total Average Hourly Wage	Average Hourly Wage Working Less than 10 Hours per Week	Average Hourly Wage Working 10 or More Hours per Week
Not mentally retarded	\$2.60	\$ 2.59	\$ 2.62
Mild	\$2.22	\$ 2.05	\$ 2.62
Moderate	\$1.95	\$ 1.92	\$ 2.39
Severe	\$1.73	\$ 1.74	\$ 1.72
Profound	\$1.24	\$ 1.24	-- ^a
Unknown/un-determined	\$2.16	-- ^a	-- ^a

Source: Minnesota DAC Survey, 1986.

^aNo data available on average hourly wage differentiated by average hours worked per week.

Question 7: What patterns are emerging based on the data collected, and, what will the transition to community-based vocational activities look like?

In 1986, for the first time, information was collected on individuals as compared to summarizing data on a centerwide basis. Before 1986, data were collected on key demographic and vocational elements, summarized, and reported. The collection of data on an individual basis allows for increased flexibility to discern patterns of change and development in vocational activities. This will prove especially useful in subsequent years, allowing for time series comparisons.

The patterns which emerged from this year's data indicated a four tiered system of vocational services:

1. There were 786 persons who did not participate in vocational activities either incenter or in the community. Of these persons, 61.4 percent had a profound or severe level of functioning. In addition, they were often multiply disabled with 27 percent having severe behavior problems and 19 percent having epilepsy.

2. The largest group of persons, 2,198 (58.1 percent) of the total sample, were persons who only worked in incenter vocational activities. These individuals worked an average of 7.5 hours per week, at an average hourly wage of \$0.61. This model of vocational service provision has been the common model for many years, and continues to be, especially for programs outside the Twin Cities area. This is also the largest group where significant strides can be taken to initiate persons into community-based vocational activities.
3. The third group was 611 persons who worked both incenter and community-based vocational activities. This group worked an average of 6.4 hours incenter and 3.9 hours in the community. The incenter average hourly wage was \$0.87 while the community average hourly wage was \$1.91. These persons tended to be from programs outside the Twin Cities area in programs where community-based activities are a supplement to incenter vocational activities. Integration occurred in 65.1 percent of the community-based activities.
4. The final group with 188 persons (5 percent of the sample) were persons who exclusively worked in community-based vocational activities. These persons tended to earn more (\$2.28 per hour), work more hours (11.1 hours per week), and were more often in integrated sites (77.1 percent). In addition, these persons tended to be higher functioning (nearly 50 percent had a mild level of functioning), were supervised less, and came from Twin Cities programs.

Continued movement into community-based employment will depend to a large degree on fostering activities in the community for all persons regardless of level of functioning or additional disabilities.

The transition to community-based vocational activities will most likely continue to follow the four tiered pattern as outlined above. The key will be to remove barriers to employment as well as explore opportunities for growth.

Question 8: Outside the Twin Cities metropolitan area, what patterns are developing for persons in community-based vocational activities?

Of the 799 persons who worked in community-based vocational

activities, 542 (67.8 percent) were from programs outside the Twin Cities metropolitan area. The significant differences between Twin Cities programs and outstate programs was that of these 542 persons, 500 (92.3 percent) also worked in incenter activities. This compares to Twin Cities programs where only 43.2 percent worked incenter and community-based activities.

These differences were most notable when examining the number and percent of persons who were exclusively in community-based vocational activities. Only 42 persons (7.7 percent) from outstate programs participated exclusively in community work, as compared to Twin Cities programs where 146 persons (56.8 percent) participated.

There were also differences in the intensity of community-based work outside the metropolitan area. Persons worked an average of 6.8 hours incenter and 3.0 hours in community-based activities. Those who worked only in community-based activities worked an average of 7.1 hours. This compares to Twin Cities programs where the average hours for incenter and community-based work was 4.8 and 8.0, respectively, and 12.3 hours for those who only worked in community-based activities.

Wages for community-based work in programs outside the metropolitan area were similar to those for participants in Twin Cities programs. The average hourly wage was \$2.22 for outstate program participants and \$2.30 for Twin Cities program participants.

The type of vocational activities for nonmetropolitan programs showed a strong tendency toward cleaning and janitorial work, and seasonal work such as snow shoveling and lawn mowing. Of 542 persons, 335 worked in cleaning and janitorial services and 163 worked in seasonal work. There may be some overlap in vocational activities, but the results indicated that 61.8 percent worked in general cleaning and 30.0 percent in seasonal work. In fact, of the persons who worked in seasonal work, 92.6 percent were in nonmetropolitan programs. Also, of the 27 persons who worked in motel/hotel room cleaning, 22 were in metropolitan programs. Of the 96 in restaurant/fast food services, 72 were in metropolitan programs. The most common activities for persons in Twin Cities program were cleaning and janitorial services and restaurant/fast food services.

Similar patterns were not as easily identifiable for grant recipients. Of the twelve recipients in 1986, nine were located outside the metropolitan area. The results often indicated the importance of the setting for activities rather than the type of activity. What is discernible from the results, was a pattern of activities geared toward the service industry. Many persons

from Twin Cities grant recipients worked in hotels and motels, restaurants and other food industries, theaters and nurseries. Grant recipients in outstate Minnesota often work in janitorial work, dishwashing, office and house cleaning, and lawn service.

Question 9: How many total hours of work were performed in the fourth quarter of 1986, and how much supervision was needed and at what cost?

The 799 persons who worked in community-based vocational activities worked a total of 58,167.2 hours, generating earnings of \$121,136.85. More earnings were generated by persons who worked exclusively in community-based vocational activities (\$61,852.75) than those persons who worked in both incenter and community-based activities.

Total supervision time for the quarter was 24,125.1 hours. It was difficult to estimate actual cost for supervision due to a number of factors including: no knowledge of the amount of supervision overlap from a job coach or trainer to a number of workers; no standard cost accounting system to identify the direct and indirect cost of providing supervision to an individual; and no formal process to discern supervision time across a number of workers simultaneously. To approximate cost an estimate of supervision staff time and wages was made. A teacher/trainer or trainer assistant earned between \$5.28 and \$8.84 per hour in 1986. If supervision hours were not overlapping, cost of supervision, based solely on direct supervision time, would be between \$127,380 and \$213,265. This figure was probably overstated but to what degree is unknown.

Information was collected from grant recipients regarding earnings but not supervision costs. For 1985, total earnings collected for 206 individuals was \$66,230.66, or \$321.50 per person for the year. For 1986, there was data available for 355 individuals, and total yearly earnings were \$369,394.33 or \$1,040.54 per person.

Question 10: What is important about this data and the collection of data similar to this in the future?

These data reveal information about the beginning of community-based employment in Minnesota, and some of the areas in which further work needs to be done. The data revealed a strong initial framework for community-based employment with a variety of activities and persons being engaged. It also revealed the need to serve more persons who have a lower level of functioning, and the need to assure that integration goals are met. This can only

occur by placing persons in settings where contact and socialization with people without disabilities is possible.

Similar data collected in future years will enable analysis of the changing patterns of community-based vocational activities. It will allow examination of changes in individual hours and wages, as well as in the types of activities and the level of integration. This data will enhance the knowledge of the barriers to community-based employment, and will facilitate policy-makers in adapting needed changes.

V. CONCLUSIONS

1. Of the 82 day training and habilitation centers that provided information on individuals, 64 had at least one person engaged in community-based employment. All of the 12 grant recipients had individuals placed in community-based employment as outlined in the grant requirements.

The number of day training and habilitation programs which had at least one person engaged in supported employment was 14. Eight of the programs were in the Twin Cities metropolitan area, while six programs were outside the metropolitan area.

It was difficult to accurately determine the number of grant recipients with persons in supported employment due to the lack of individual information on hours worked.

2. Of the 3,783 persons in which data was available from day training and habilitation centers, 799 were engaged in community-based employment, and of the 799, 50 were engaged in supported employment. All 469 persons from grant recipient information were active in community-based employment. At least 181 were working sufficient hours to be considered in supported employment.
3. A total of 58,116 hours were worked in community-based activities during the fourth quarter of 1986 for persons served in day training and habilitation centers. These hours generated over \$121,136 in earnings. No summary data was available for total hours worked from grant recipients. Total earnings were available for 355 individuals, which was \$369,394.

4. Integration with persons without disabilities is one of the goals of community-based employment. Of the 799 persons from day training and habilitation centers in community-based work, 544 (68.1 percent) were in integrated settings. Persons not in integrated settings often did not come in contact with persons without disabilities. Data were not collected on integration for persons served with grant funds.
5. The two leading types of activities worked by persons from day training and habilitation centers were general cleaning/custodial and outdoor seasonal activities. For grant recipient participants the leading type of work was maintenance, janitorial, custodian, and/or cleaning.

VI. REFERENCES

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