SURVEY AND COST ANALYSIS
OF
EDUCATIONAL AND VOCATIONAL PROGRAMS
AT
MINNESOTA STATE PRISON
AND
STATE REFORMATORY FOR MEN

prepared by
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Summary

This study was undertaken to assess the participant cost and inmate utilization of the educational and vocational programs at the Minnesota State Prison and the State Reformatory for Men and to provide a more detailed accounting of program costs than is available through normal budget procedures. Part I of the report contains an analysis of educational and vocational programs at MSP and Part II contains a similar analysis of programs at SRM.

Although there are many methods of analyzing the economic aspects of programs or agencies, the choice in this case was largely dictated by the financial accounting procedures of the Department and by the record keeping system of the education unit at MSP and SRM.

The original plan called for a cost analysis of fiscal year 1976-77 expenditures for educational and vocational programs. This proved to be impossible because records on student participation were not available for the entire period. As a result, data was collected for the six month period, January 1, 1977 through June 30, 1977. The average number of participants was calculated for this period and under the assumption that this average would remain relatively constant was applied to the annual expenditures for the individual programs.

At MSP records were obtained from two educational programs: the Adult Basic Education (ABE) program and the General Education Development (GED) program. Both of these programs are designed for inmates who have not finished high school. The vocational programs in operating during the study period and for which data were collected are welding, drafting, office machine repair, Pro Shop, machine shop and Arts in Corrections.

At SRM data were collected for thirteen vocational programs, six educational programs: the high school, Learning Resource Center, Adult Basic Education, General Education Development (GED), Title I, Higher Education, and the Arts in Corrections program.

Program expenditures were obtained from the Department of Corrections (DOC) accounting section, the central office education unit and the education directors at MSP and SRM. The cost figures include instructor salary and fringe benefits, supplies and other instructional materials and administrative costs. These figures do not include indirect costs or capital expenditures. Such expenditures in the public school system increase the cost of elementary and secondary education by sixty percent. The tables below summarize program participation and cost per participant year.

TABLE 1: Total Direct Program Expenditures and Cost Per Participant Year at MSP

Program	Direct Expenditures	Average Full-Time Participants	Average Cost Per Participant Year
ABE-GED	$ 59,155	26	$ 2,275
Art in Corrections	33,439	6	5,573
Welding	32,672	7	4,667
Drafting	29,617	9	3,291
Office Machine Repair	27,529	11	2,503
Pro Shop	29,284	9	3,254
Machine Shop	26,344	8	3,293

TABLE 2: Total Direct Program Expenditures and Cost Per Participant Year at SRM

Program	Direct Expenditures	Average Full-Time Participants	Average Cost Per Participant Year
High School (includes drafting)	$ 199,235	64	$ 3,113
Higher Education	62,283	28	2,224

Supplementary Programs (Part-Time)	Direct Expenditures	Average Part-Time Participants	Average Cost Per Participant Year
ABE	$ 34,348	31	$ 1,108
LRC	59,599	41	1,454
Title I	79,049	31	2,550
Arts in Corrections	14,390	12	1,199

TABLE 2a: Vocational Program Expenditures and Average Annual Cost Per Participant at SRM

Program	Direct Expenditures	Average Number of Participants	Average Participant Cost Per Year
Auto Body	$ 25,076	9	$ 2,786
Auto Mechanics	29,750	11	2,705
Baking	29,337	8	3,667
Barbering	29,296	5	5,859
Furniture Finishing	27,738	6	4,623
Masonry	29,684	12	2,474
Meat Cutting	29,141	7	4,163
Painting and Decorating	26,849	5	5,370
Printing	57,954 (2 classes)	12	4,830
Sport and Specialty Engines	28,120	8	3,515
Upholstery	54,156 (2 classes)	16	3,385
Welding	23,293	10	2,329
Woodcraft	55,025 (2 classes)	13	4,233
Total	$ 445,419	122	$ 3,833
		Computer Assisted Instruction and Supplementary Programs	$ 1,283

It is generally recognized that to provide effective educational or vocational programs in corrections facilities the cost will be higher than the cost per student in public school systems. If suggested standards for student-teacher ratios in correctional institutions are accepted, per student costs in correctional institutions could be expected to be eighty to ninety percent higher than in public school systems. A comparison of the average institutional costs in Minnesota elementary and secondary schools and the education programs at MSP indicate that MSP per participant costs are ninety-five percent higher than comparable costs in Minnesota public schools. A large percent of MSP costs are salary costs and a smaller proportion are for materials, supplies and other instructional resources. MSP teachers, for example, average over $3200 more than comparable teachers in Wisconsin correctional facilities. Direct instructional costs for selected Area Vocational Technical Institute (AVTI) programs in Minnesota are also considerably less than at MSP. For the five AVTI programs examined, the average cost at MSP was fifty-four percent higher than comparable costs in the public school system.

As could be expected, SRM educational costs are higher than those at MSP primarily because of the wide variety and types of special needs programs offered.

Total educational costs excluding GED testing and Arts in Corrections average $3682 per full-time equivalent student. Another reason for the higher costs at SRM is that salaries of the education staff are a good deal higher than those at MSP partly because of the longer tenure of teachers at SRM. Salary costs alone are $3567 per participant year compared with $993 (twelve month) salary costs per pupil in Minnesota public schools, including salaries of principals, consultants, coordinators, psychologists and other instructional resource personnel.

The National Advisory Commission on Criminal Justice Standards and Goals has developed some average costs for institution based education programs. These costs, however, include capital expenditures and other indirect expenditures. The Standards suggest a cost of approximately $4500 per student year, and recommends that educational programming be geared to a variety of attainment levels, age levels and individual problems. If we assume that direct costs represent sixty percent of total costs then MSP education program expenditures meet the cost standard. There is some question, however, if they meet the requirement of flexibility and diversity in educational programs.

SRM, on the other hand, does offer a diversity of educational programs from Adult Basic Education to Higher Education. Again assuming that direct costs represent sixty percent of total costs then SRM total education expenditures could be estimated at $6150 per participant year which is a good deal higher than suggested minimum correctional standards.

In the same manner, standards for vocational programs in correctional institutions were recommended by the Advisory Commission. An annual per student expenditure of $2400 (adjusted figure) is recommended as a minimum standard for in-institution vocational training. This figure also includes average capital costs and other indirect expenditures. Again, if we assume that total costs are roughly double the direct costs comparable MSP vocational programs would be estimated at over $7000 per student year. One of the reasons for this excessive cost may be that only the formal vocational education programs at MSP are included while the National Advisory Commission recommendation is based on a wide variety of vocational training programs as well as on the job training programs.

In a similar manner, SRM total vocational costs could be estimated as over $7500 per year. Most of this increase over MSP costs can be attributed to the higher salaries paid vocational teachers at SRM, an average of $3000 more per year. Another factor affecting program costs at both institutions is the low student teacher ratio. The National Advisory Commission recommends a ratio of twelve to one. Both SRM and MSP maintain a ratio of approximately eight to one.

Recommendations:

Based on the results of this cursory cost analysis, several recommendations seem appropriate.

1. An effort should be made to maintain the programs operating at near capacity. If there are not enough potential students in the institution population to maintain this capacity perhaps the program should be discontinued.

2. A better accounting system should be developed to make it possible to allocate program costs more easily.
3. Accurate daily record keeping of the number of students participating should be maintained for each class and reported regularly to the education director and to Central Office in order to provide some bases for accountability.
4. The Department of Corrections administrators, institution administrators and education directors should decide what the purpose and goals of such programs are to be and actively support the attainment of such goals. The cost of these education and vocational programs is too great to justify their existence merely as a means to keep inmates occupied.

Until such recommendations are implemented, the cost-benefit or cost effectiveness of educational or vocational programs in Minnesota correctional institutions cannot be assessed and if assessed may not only prove to be ineffective but also to have an extremely high cost to benefit ratio.

PART I

MINNESOTA STATE PRISON

Introduction

The cost of criminal justice activities has increased over 200 percent in the last decade. Increased public concern over the rising crime rate resulted in vast out-pourings of federal monies for criminal justice programs. More recently, studies have questioned the concept of offender rehabilitation programs. At a time when other social programs are demanding more and more of the tax dollar, there is increased interest in an assessment of the results of government expenditures. When budget requests exceed the available revenue, resources must be allocated on the basis of need, effectiveness and maximum utilization of resources.

Although there are many other programs and services that demand a share of the corrections dollar in Minnesota, this study is concerned only with the assessment of costs of the educational and vocational programs at the Minnesota State Prison (MSP). The major concern is not the lack of resources, but rather the utilization of the resources that do exist. Expanding educational and vocational programs or establishing new ones at MSP makes sense only if the programs that already exist are being fully utilized. It was with these concerns in mind that this study was undertaken.

Background

There are four major types of economic analyses that have application for decision making. A common form is simple cost analysis. This type of cost analysis does not have the decision making importance of the more sophisticated measures, but is often a necessary first step. Cost analysis should consider all direct and indirect costs, operating costs, support services costs, capital costs and other non-appropriated funds expended. The kinds of costs and details used depend to a large extent on the availability of detailed budget items and the purpose of the analysis. A cursory cost analysis may use only direct recurring costs.

The second major form of economic analysis is comparative cost analysis. This type of analysis may be used to compare costs of two or more agencies or programs at some point in time or a single program at two points in time. There are certain difficulties inherent in comparing two agencies that must be considered -- differing start-up times, quantity of service provided or value of donated services. Often these kinds of detailed expenditures are not available or not totally comparable.

The third major type of economic analysis is cost effectiveness. This method relates cost to some physical measure of program output. A primary role of this kind of analysis is to provide information on additional resources needed to bring about a specified level of results. To determine cost effectiveness it is necessary to have a clear statement of objectives and goals of the program.

Cost Benefit analysis is an attempt to apply economic criteria to output and requires translating benefits into dollar figures. For example, benefit to the offender derived from an educational program, might be translated into increased earning power, thereby increasing benefit to society by payment of taxes, removal from welfare rolls and presumably eliminating further contact with the Criminal Justice System.

All these methods of analyzing the economic aspects of programs or agencies are difficult under budgeting and accounting procedures normally used by governmental agencies and, in some instances, proper cost allocations are almost impossible. The method chosen depends to a large extent on the kinds of cost figures it is possible to obtain, the types of output measures designated and the purpose the analysis is to serve.

Related Research

Some efforts have been made recently to develop cost figures for educational and vocational programs in correctional institutions throughout the country. These figures are related to the standards suggested for such programs by the United States National Advisory Commission on Criminal Justice Standards and Goals.[1]

It is generally recognized that to provide effective academic educational programs in correctional facilities, the cost must be higher than the cost per pupil in a normal academic environment. According to standards suggested by the National Advisory Commission on Criminal Justice Standards and Goals, minimum standards would require a $4500 to $4800 annual expenditure per participant.[2] (Figures adjusted to 1977 dollars.) These cost estimates, however, include capital and indirect costs which are not included in the institutional costs. These figures assume a twenty-five percent participation rate in educational programs. Costs for in-institution vocational training will also be considerably higher than comparable costs in the public system. The National Advisory Committee suggests a minimum standard of $2400 per pupil for prison vocational training programs. These estimates are based on a participation rate of fifteen percent of the institution population. In public elementary and secondary schools a class size of twenty-five to thirty is generally felt to be the maximum size. Some evidence suggests that for the disadvantaged slow learners and dropouts, a reduced class size is more effective. Since many prison inmates fall into these categories, the Advisory Commission recommends a ratio of twelve students to each teacher for educational and vocational programs in correctional facilities.

There is considerable disagreement about the economic benefits of academic education programs in correctional institutions. Often benefits are realized only if the inmate gets a GED or completes high school, because a high school graduation or equivalency is often a major credential for entering the labor market. Thus, raising the reading grade level several years may have no real impact on the future of the inmate once he is released. It has been estimated, however, that a high school diploma returns fifteen to twenty percent in increased lifetime earnings.[3]

At MSP, twenty-nine percent of those terminated from the education programs received a GED. This is a comparatively high completion rate. In the Alabama Draper Correctional Center, Intensive Education Project, nineteen percent of the inmates enrolled passed their GED test.[4] In California Department of Corrections facilities the percentage of inmates completing the GED program averaged sixteen percent.[5]

The case for economic benefits of vocational programs in correctional institutions does not fare a good deal better. Vocational training has traditionally been a part of rehabilitation efforts, particularly for younger inmates, but has had less emphasis in prisons housing older inmates. Such programs are designed to give a student the skill necessary for successful competition in our society. The benefit for the inmate is thought to come from increased earnings on the outside. It has not, however, been demonstrated that prison vocational training has any impact on the offender's work behavior outside the institution. A 1962 study of a California Prison vocational training program found that fewer than one-third of the graduates of a training program were employed in the industry or related skill for which trained.[5] In the Draper Correctional Center training program it was found that the proportion of released offenders working in jobs related to their training was seventeen to thirty-two percent depending on the type of training.[2] The same study found that an untrained control group performed as well as any trainee group in terms of both employment and income.[2] In a follow-up of graduates of the Sandstone Vocational Training School, it was found that sixty-one percent were employed seven months after completion[6] and of these forty-three percent were employed in their special skill area.

Method

This analysis was initiated to provide a more detailed accounting of program costs than is available through normal budget procedures. The goal of the study, then, is to provide the Department of Corrections with an analysis of comparative costs of the several programs and suggest ways to make more effective use of the resources available.

The original plan called for a cost analysis of fiscal year 1976-77 program expenditures. The depth of the cost analysis would be dependent on the availability of detailed expenditures for each of the programs. It was soon decided that the financial accounting procedures used by the DOC did not permit a detailed accounting of costs. For example, support services such as payroll and accounting, personnel services and other centralized services or overhead costs could not be isolated for specific programs. Capital expenditures for start-up costs, repair or new equipment are not included since state accounting procedures do not always identify these costs as program related. Even direct program costs are simply grouped into vocational and academic budget items. However, with the help of the Central Office accounting staff and the Minnesota State Prison educational staff, it was possible to allocate these direct costs to the individual programs. In addition, funds from the Central Office budget allocated to institutional programs were isolated and included in program costs. Nevertheless, the cost data used here is cursory at best and includes only direct operating costs. It is estimated that as a minimum, costs would have to be increased by approximately sixty percent to include indirect costs, support services and capital expenditures.

The second problem encountered in this attempt to review educational and vocational programs was the lack of adequate record keeping of clients served. The education staff at MSP acknowledged that it would be virtually impossible to obtain records of inmates participating in these programs prior

to January 1, 1977. It was agreed, then, that student data would be collected for a six month period and the average number of participants during that period would be used to calculate the annual cost per participant. This method would provide a reliable figure except in such cases where a great difference in the number of participants during the first and last half of the year existed. This did not appear to be the case in any of the programs reviewed.

Information on students was collected by the teachers involved and included test scores when available, the date of admission and termination, time in program and reason for termination. Data was collected on two education programs: the ABE (Adult Basic Education) and the GED (General Education Development) programs. There were six vocational programs for which data was available: welding, drafting, office machine repair, arts in corrections, machine shop and the Pro shop (prosthetics repair shop).

Data Presentation

During the fiscal year under study there were only two educational programs available at MSP, both designed for inmates who had not finished high school. The Adult Basic Education program is intended for students who read at or below the eighth grade level and is designed to improve their skills sufficiently to enter into the GED program.

In 1977 about seventeen percent of MSP inmates had completed eight grades or less but many others also scored below the eighth grade level. Over fifty percent had not finished high school. One would expect then, that twenty to twenty-five percent of the prison population would be eligible for ABE and an additional twenty-five to thirty percent would be eligible for the GED program. Yet, at any one time, less than three percent were enrolled in ABE or GED programs. Vocational programs were not utilized much better. Less than six percent of the inmates were enrolled in vocational programs at any one time.

The total number of inmates participating in an educational or vocational program at MSP was 232 during the six month period for which data were collected. This represents about seventeen percent of the total prison population during that period. A few inmates participated in more than one program; primarily those who completed the Adult Basic Education and moved into the GED program.

In spite of the established need for ABE and GED programs and the lack of vocational skills of many of the inmates, participation in these programs remains relatively low. It appears that vocational as well as educational programs must compete with the needs of industry and the higher pay available in the private industries program. Also, the prison population is somewhat older than that at the State Reformatory for Men (SRM) and many inmates may have tried various training programs before. Inmates who had not completed high school before incarceration face similar problems. Many may have had repeated attempts and failures in the public school system, and are no longer interested. Whatever the reasons, the low rate of participation tends to increase the cost per inmate participant of such programs.

The following tables indicate the number of inmates entering and leaving the various programs during the six month period and the mean raw scores and percentile rank received on the standardized AGCT Test.

TABLE 3: Current Status or Reason for Termination

Reason	ABE #	ABE %	GED #	GED %	Arts in Corrections #	Arts in Corrections %	Welding #	Welding %	Drafting #	Drafting %	OMR #	OMR %	Pro Shop #	Pro Shop %	Machine Shop #	Machine Shop %	Total #	Total %
Active	16	42.1	24	33.8	9	45.0	16	47.1	7	46.7	10	43.5	8	44.4	11	84.6	101	43.5
Parole	4	10.5	-	-	2	10.0	-	-	-	-	4	17.4	2	11.1	1	7.7	13	5.6
GED			20	28.2													20	8.6
Certificate			6				10	29.4	5	33.3	7	30.4	2	11.1			30	12.9
Drop-Out	6	15.8	8	11.3	2	10.0	8	23.5	3	20.0	1	4.3	6	33.3	1	7.7	35	15.1
Fail			5	7.0	2	10.0					1	4.3					8	3.5
Transfer	1	2.6	3	4.2	2	10.0											6	2.6
Enter New Program	7	18.4	1	1.4													8	3.5
Termination by Education Unit	4	10.5	4	5.6	3	15.0											11	4.7
Total	38		71		20		34		15		23		18		13		232	

TABLE 4: AGCT Percentile and Mean Raw Score

AGCT Test	ABE	GED	Arts in Corrections	Welding	Drafting	OMR	Shoe Repair	Machine Shop	Total
Mean Score	77	98	101	97	118	117	102	119	99
Percentile Rank	22	45	50	45	80	78	50	81	50

There appears to be a good deal of variation in drop-out rate among the several programs. The highest drop-out rate was for Pro-shop participants, the lowest for Office Machine Repair students. The proportion of vocational students earning a certificate was similar (about one-third)for welding, drafting and OMR students. The Pro-shop had a low completion rate (eleven percent) and the machine shop program had not been in existence long enough to have had program graduates.

The AGCT (Army General Classification Test) was administered to most inmates on admission to the institutions. Table 2 indicates the average raw score received by students in each of the programs and the corresponding percentile rank.

The following table highlights the number of weeks of participation and the average number of participants.

TABLE 5: Program Participants (January 1, 1977 through June 30, 1978)

Program	Capacity	Percent Capacity	Total Participant Weeks	Number of Participants	Average Number of Weeks	Average Number of Participants	Full-time Equivalence
ABE	20	70.0	429	60	10	19	14
GED	15	80.0	429	71	6	16.5	12
Art in Corrections	10	60.0	319	20	16	12	6
Welding	11	63.6	186	34	5.5	7.2	7.2
Drafting	10	90.0	233	15	15.5	9	9
Office Machine Repair	12	91.7	292	23	9	11	11
Pro Shop (5 mo.)	12	75.0	191	18	11	9	9
Machine Shop	15	53.3	200	13	16	8	8

The average number of participants was obtained by dividing the total participant weeks by twenty-six, the number of weeks in a six month period. The assumption was made that this average would change little if a twelve month period were used. Since not all students in the education program and the arts in corrections program were full-time, a full-time equivalency was calculated. For the ABE and GED programs, any student who attended more than twenty hours a week was considered full-time, all others were considered half-time. All arts in corrections students were considered half-time. This procedure would tend to over-estimate the actual number of full-time equivalent students.

The percent of capacity at which programs were operating during this period was calculated by dividing capacity by the average full-time equivalence. Only three programs were operating at a relatively high percent of capacity: the GED program, drafting and office machine repair. The machine shop rate may be low simply because of delays during start-up time.

Program Costs

The following table (Table 6) indicates total direct program expenditures and cost per participant year for fiscal year 1976-77.

TABLE 6: Total Direct Program Expenditures and Cost Per Participant Year

Education	Total Expenditure	Cost Per Participant Year
ABE, GED	$ 59,155	$ 2,275
Vocational		
Welding	32,672	4,667
Drafting	29,617	3,291
Pro Shop	29,284	3,254
OMR	27,529	2,503
Machine Shop	26,344	3,293
Art in Corrections	33,439	5,573
Total Vocational	178,885	3,578

Administrative costs of the prison educational and vocational programs are allocated equally among all programs. These costs include salaries of the education director and the education coordinator.

It is to be expected that direct educational program costs in a correctional institution will be higher than in public elementary and secondary schools. In fiscal year 1975-76 the average per pupil salary cost in Minnesota public schools was $711. This includes all salaries of instructional personnel including principals, consultants, coordinators, psychologists and other instructional resource personnel. Adjusted to 1976-77 dollars the cost per pupil would be approximately $745. This figure represents cost per pupil for a nine month year. Comparable twelve-month year costs would be $993. At MSP similar salary costs are $1937 per participant. If the standards for student teacher ratio for correctional institutions are accepted, it could be expected that the cost of educational and vocational programs in correctional institutions would be nearly twice that of public schools, and while the education costs at MSP are not quite double those of the public schools, neither do they include additional instructional personnel which are included in the public school salary expenditures.

One of the reasons the cost of educational programs at MSP is high in relation to the services provided, is the relatively high salaries of educational personnel at MSP. (At MSP the average 1977-78 salary is over $18,000.) A comparison can be made with teacher salaries in Wisconsin: the average 1977-78 salaries for teachers in Wisconsin correctional institutions with a Masters Degree is $14,789.

While salary costs at MSP are high, non-salary instructional costs such as supplies, equipment and various other resources, are low. Minnesota public schools spend an average of $170 per full-time student for instructional materials compared with $88 at MSP, and while statewide non-salary instructional costs comprise fifteen percent of total instructional costs, at MSP non-salary costs comprise only five percent of instructional costs.

One of the reasons for the low per participant cost of instructional materials at MSP is that few consumable supplies are used. The major source of instruction is a series of video tapes. The cost of these tapes is not included in the 1976-77 expenditures. There are no textbooks and the test booklets are re-usable. The cost of supplies, thus, is very minimal.

These costs, however, may be misleading because monies from a federal grant for computer instruction were not included. During the fiscal year under consideration there were five computer terminals in use at MSP with an operating cost of $43,075. If these costs are included, an additional cost of $565 per participant would be added to each program. This would raise the annual participant cost to $2840 for educational programs and to $4143 for vocational programs. Although the initial grant for computer assisted instruction was an experimental program, two Plato terminals continue to be used for instruction in the educational and vocational programs.

Current statewide costs for vocational education are not available; however, the Higher Education Coordinating Board has compiled average direct instructional costs for selected AVTI programs. Table 5 shows these costs for office machine repair, machine shop, shoe repair, welding, and drafting. Of course, costs for individual programs vary substantially from school to school depending on the average daily number of participants as well as cost of instruction and administration.

TABLE 7: Direct Instructional Costs for Selected AVTI Programs

	Statewide AVTI Programs			
Program	Number of Institutions	Average Participant Per AVTI	Direct Costs Per* Participant	MSP Programs
Office Machine Repair	2	16.1	1953	2503
Machine Shop	13	43.1	2887	3293
Shoe Repair	1	13.3	2159	3254
Welding	24	37.1	2351	4667
Drafting	31	36.3	1700	3291

*Adjusted for twelve month year.

Again, comparing direct costs may be misleading because many program costs actually attributable to the vocational programs at MSP could not be documented. At any rate it appears that program costs at MSP are higher than other statewide programs due to several factors. The major factor, of course, is the lower teacher-student ratio in MSP programs. Then, too, because of remodeling, development of new programs or lack of interest on the part of the inmates, few of the training programs were operating at capacity. Another factor may be the relatively high salary and fringe benefits of instructional staff, over $20,000 in 1976-77. These costs will jump to almost $24,000 in fiscal year 1977-78.

While it is evident that this cost analysis of the educational and vocational programs at MSP is cursory at best and clearly demonstrates the need for better program budgeting as well as record keeping within the education unit itself, it does provide minimum estimates of basic program costs per participant year.

Inmate Questionnaire

Another goal of this study was to explore some of the reasons why MSP inmates do not participate in educational and vocational programs. A questionnaire was distributed by the MSP Education Director to every inmate. The number of questionnaires returned was very low, less than eight percent, which may be indicative of the general lack of interest in educational and vocational programs at MSP or to the method used to solicit responses. The questionnaire was placed in each inmate's box and a follow-up request was also made. Completed questionnaires were to be returned to the MSP Education Department. Most of the inmates who did respond were already enrolled in a program.

The ethnic background of respondents was proportional to the total institutional population but there were some clear-cut differences in characteristics and occupational interests. Whites were represented in every age group; on the other hand, eighty-one percent of the blacks responding were twenty-six to forty years old. Other minority respondents were all under thirty years old. White respondents had been incarcerated for a longer period of time than non-white respondents. Reasons given for not participating were also different. White respondents were more likely to feel that they didn't need training or would rather work. Non-whites were more likely to feel that no programs offered were of interest to them or that they were given other assignments. Of those inmates responding, whites were more likely to be enrolled in vocational programs and non-whites were more often enrolled in education programs.

When asked about what kinds of training they would like to have offered, whites were more likely to want technical skill training such as electronics, programming, mechanics or sheet metal. Blacks were more interested in cosmotology, barbering, counseling, sales or tailoring.

PART II

STATE REFORMATORY FOR MEN

Background

This study was undertaken in conjunction with a survey of educational and vocational programs at MSP, but is presented in a separate section without comparison to programs or program costs at MSP. The approach was taken because it was felt that without an in-depth analysis of total program activity and an understanding of the special needs of the inmates at the two institutions cost or program comparisons of this type could be misleading.

Method

The original plan called for a cost analysis of fiscal year 1976-77 program expenditures. A simple analysis using direct operating costs was decided upon because of the difficulty under current financial accounting procedures of obtaining detailed accounting of other indirect or related program costs. Nevertheless, this analysis should provide a more detailed accounting of these costs than is currently available through normal budget procedures.

In addition to the difficulty of allocating program costs, the lack of systematized record keeping of clients served made collecting data on inmate participation in the various programs a time-consuming task. For this reason as well as because of the large number of students involved in the reformatory programs, it was decided that data would be collected for the six month period January 1 through June 30, 1977. The average number of participants was calculated for each program and used to determine the annual cost per participant. This method would provide a reliable figure except in such cases where a great difference in the number of participants occurred throughout the year. This did not appear to be the case in any of the programs reviewed. Information on students involved in vocational programs was collected by the research staff from payroll records; most of the data for the educational programs was provided by the education staff at SRM. Program expenditures and allocations were obtained from the Department of Corrections accounting unit, the Central Office education staff and the Fiscal Officer and the Education Director at SRM.

Data were collected for thirteen vocational programs: auto body building, auto mechanics, baking, barbering, furniture refinishing, masonry, meat cutting, painting and decorating, printing, small engine repair, upholestry, welding and woodcraft. Programs classified under education are: the High School Learning Resource Center, Adult Basic Education, General Education Development, Title I, higher education and Arts in Corrections. SRM also has a drivers' education and training program but records of the number of students participating were not available. No attempt was made to assess the effectiveness of any of the programs.

Data Presentation

The Minnesota State Reformatory, unlike MSP which serves somewhat older inmates, places a great deal of emphasis on its educational and vocational programs. The need for such programs seems evident. Three-fourths of the offenders admitted to SRM had not completed high school prior to commitment.

Few had significant vocational training or work experience. During the six month study period there were 751 program participants representing 468 individuals or about 54% of all inmates entering the reformatory. Almost 350 of these were enrolled in education programs leading to a GED or high school diploma; many participated in both vocational and educational programs. With the exception of higher education and high school, most other educational programs are part-time, generally only one or two hours a day. Vocational programs are considered to be full-time, although only six hours a day are spent in training. Thus, many of these students may spend an additional hour in selected high school classes or supplementary programs such as Title I, ABE, or the Learning Resource Center.

The largest single education program offered at SRM is high school, with an average of fifty-seven full-time and twenty-five part-time students. During the six month period under study, thirteen students received high school diplomas. Many students attended high school classes as preparation for the GED or to upgrade reading or mathematics skills needed for many vocational training programs

The GED, although listed as an educational program, is primarily a testing procedure. Pre-tests are administered to students seeking a high school equivalency to assess their ability to pass the GED examination. If test scores are low, the student may need further preparation before taking the examination. This preparation may be through self-study, LRC, Title I, ABE or high school classes. Many students who do obtain a GED Certificate continue high school class attendance preferring, in some cases, to have a regular high school diploma, if possible, before leaving the institution. During the first half of 1977, ninety-four inmates were given the pre-test screening examination. A total of fifty-one inmates were administered the GED test and thirty-three of these or sixty-five percent passed the examination.

In addition to programs leading to a high school degree, several higher education opportunities exist. The higher education program gives inmates an opportunity to earn college credits at SRM. Credits earned in the college program are transferable to colleges and universities in the community. Since the opportunity to enroll in correspondence courses through the Extension Division of the University of Minnesota, most inmates spend no more than righteen months at SRM, 'completion' of education programs has little meaning although a student may be able to obtain a high school diploma or GED in that period of time. Because of the nature of these programs, the turnover rate is high. The exception is the higher education program which maintains a relatively stable population and a turnover rate of less than eighteen percent.

Vocational programs, on the other hand, are designed to provide the inmate with competencies necessary to meet trade entry level skills and are normally considered to require a year of training. These programs at SRM are plagued by high turnover rates and a very low rate of completion.

The following table shows the reason for leaving the program and the rate of turnover of the various vocational programs.

TABLE 8: Reason for Leaving Program and Rate of Turnover

	Active As of 6-30-77	Parole/ Discharge	Drop-Out/ Fail	Trans- ferred	Certificate/ Completion	Change Program	Other/ Discipline Reasons	Total	Percent Turnover Rate
Auto Body	8	2		1		1	2	14	42.9
Auto Mechanics	9	1		1	1	2	1	15	40.0
Baking	7	-		9		2		18	61.1
Barbering	6	1	1	-		-		8	25.0
Furniture Refinishing	5	2		2		4		13	61.5
Masonry	7	4		2		4		17	58.8
Meat Cutting	5	1		4		2	1	13	61.5
Painting and Decorating	5	-		1	2	1	2	11	54.5
Printing	10	2	3	4		3		22	54.5
Small Engine	6	3	1	-		2		12	50.0
Upholstery	15	5		4		13	2	39	61.5
Welding	6	-	1	6		5	2	20	70.0
Woodcraft	15	1		1		5	2	24	37.5
Total	103	22	6	35	3	44	12	255	47.8

As can be seen, the overall turnover rate in the vocational training programs is forty-eight percent. This rate varies from twenty-five percent for barbering to seventy percent in the welding program. Baking, furniture refinishing, meat cutting, upholestry and welding all had turnover rates of more than sixty percent. Some of the programs such as baking lost fifty percent of their students by transfer; welding lost thirty percent. A relatively small proportion were lost by reason of parole or discharge. Part of this extremely high turnover rate is due to the policy of allowing students to try a program for two weeks to see if they like it, thus forty percent of the turnover rate was because the inmate chose to drop out or change programs. The average length of stay in a program was fourteen weeks.

Because of the high turnover, few students stay in the programs long enough to obtain a certificate. During the six month period only three students or 2.5 percent of those terminated completed a program and received a certificate. While limited training or simply familiarization with vocational programs and job opportunities may help an inmate obtain a job on the outside, in the majority of cases the skills learned are at best minimal, and may not provide sufficient training to meet the requirements of some of the more technical apprenticeship programs in the community. This certainly raises a question about the cost effectiveness or cost benefits of programs in which turnover rate is so high and completion rate so low.

Program Costs

The following tables present total direct program expenditures and cost per participant year for fiscal year 1976-77.

TABLE 9 : Total Direct Education Program Expenditures and Cost Per Participant Year

Program	Direct Expenditures	Average Number of Participants	Average Cost Per Participant Year
High School (includes drafting)	$ 199,235	64	$ 3,113
Higher Education	62,283	28	2,224
Supplementary Programs (part-time)			
ABE	34,348	31	1,108
LRC	59,599	41	1,454
Title I	79,049	31	2,550
Arts in Corrections	14,390	12	1,199
GED (testing)	15,177	145 (tests administered)	105

Students in the part-time supplementary programs usually spend from one to one and one-half hours per day in the classroom so that these costs must be viewed somewhat differently. Since ABE, Title I and LRC are special needs programs, the costs may more appropriately be allocated between the vocational programs and the high school program. If the $172,996 is allocated equally for each student participating in the education and vocational programs, the additional cost per year would be $930.00. An additional $353 must be added to the participant costs if computer assisted unstruction costs and curriculum development costs incurred during this period are included. (Curriculum Development costs are pro-rated over a five year period)

The addition of these two costs brings the total cost of the high school program to $4,396 per participant year.

Arts in Corrections is an independent program operating outside the regular high school program and is not included in supplementary program costs and the GED program is primarily a testing procedure. A total of 145 tests, either pre-tests or GED examinations, were administered at a cost of somewhat over $100 per test.

Vocational program costs are presented in the next table.

TABLE 10: Vocational Program Expenditures and Average Annual Cost per Participant

Program	Direct Expenditures		Average Number of Participants	Average Participant Cost per Year
Auto Body	$ 25,076		9	$ 2,786
Auto Mechanics	29,750		11	2,705
Baking	29,337		8	3,667
Barbering	29,296		5	5,859
Furniture Finishing	27,738		6	4,623
Masonry	29,684		12	2,474
Meat Cutting	29,141		7	4,163
Painting and Decorating	26,849		5	5,370
Printing	57,954	(2 classes)	12	4,830
Sport and Specialty Engines	28,120		8	3,515
Upholstery	54,156	(2 classes)	16	3,385
Welding	23,293		10	2,329
Woodcraft	55,025	(2 classes)	13	4,233
Total	$ 445,419		122	$ 3,833
			Computer Assisted Instruction and Supplementary Programs	$ 1,283

There is a wide variation in per student cost of the vocational programs which is only minimally related to cost of supplies. For many of the programs the cost of supplies is offset by profits from the finished product. These monies go into a general fund from which various programs may draw; however, records do not permit the allocation of these expenditures to specific programs. Thus, the expenditures for supplies which are included above are probably underestimated. The primary reason, however, for the wide variation in per participant costs are the average number of students and the instructor's salary. Differences in salary can range as high as $5,000 per year which may increase the participant cost as much as $1,000 per year in programs with few participants.

The following table shows the breakdown of expenditures by type for education and vocational programs as a whole. The relatively low proportion allocated to supplies for the vocational programs strongly suggests that such expenditures are grossly underestimated.

TABLE II: SRM Educational-Vocational Programs and Type of Expenditures

Type of Expenditure	Educational Programs Total	Educational Programs Percent	Vocational Programs Total	Vocational Programs Percent
Instructional Salary and Fringe Benefits	$ 415,993	87.7	$ 369,804	83.0
Administration	36,575	7.7	66,208	14.9
Supplies and Miscellaneous	22,036	4.6	9,407	2.1
Total	$ 474,604	100.0	$ 445,419	100.0

While administration costs at SRM seem relatively high they are lower than those at MSP primarily because of the larger numbers of programs to which administrative costs can be allocated. Overall administrative costs comprise over eleven percent of annual expenditures for educational and vocational programs at SRM; almost eight percent of the academic education programs and fifteen percent of vocational training programs.

In conclusion, even a cursory cost analysis such as this clearly demonstrates the high cost of education and vocational training in correctional institutions, a cost that often goes unchallenged because of the widespread faith the public has in the intrinsic value of education and vocational training. However, there may be some reason for concern about the value of such programs, not only in terms of cost but in terms of the impact on the students' life in the community. If the education or vocational training received in a correctional institution simply raises the student's expectations without also giving him the requisite skills to meet these expectations in the community, then, in fact, such programs may very well have as much negative as positive impact. There has been no consistent effort made to determine whether or not the training received has any measureable impact on the employability of the ex-offender.

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