In pilot projects at Newark and Philadelphia, the Penn Central Company used adult basic education (for the Philadelphia trainees) along with on the job training to prepare 51 low skilled, middle aged blue collar workers (mostly minority group employees of long standing) for clerical jobs in a computerized system. All the trainees were successfully placed within the company. (Course outlines are included.) (LY)
RETRAINING OLDER EMPLOYEES FOR UPGRADED JOBS

An address by

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Retraining Older Employees for Upgraded Jobs

Penn Central Company came into the retraining area I am going to describe here somewhat accidentally. Our program originated as a very practical matter. The United States Post Office Department withdrew certain bulk handling of mail at various locations across our properties. This left us with some low-skilled people holding low-skilled jobs -- particularly baggage and mail-handlers, stevedores, and people in this category.

These were older people, however, experienced in railroad operation, and I think we have to look at experience as offering both pluses and minuses.

We knew we would have to train for highly specialized freight-handling occupations linked to computerization. One of the pluses would be the low turnover that could be expected of a group such as this. We did not think that, after training, these employees would leave the company. This is one of the pluses in an experienced older group.

One of the minuses in this case was that the employees' experience was in blue-collar work, using their physical rather than their mental powers. Our need was primarily for clerical people, people who would have to use their mental capacities.

There was a further consideration, a practical one of costs, and here we saw the training of these men as a plus. Incident to the merger of the Pennsylvania and the New York Central, and the inclusion of the New Haven, our companies gave every person then employed a job-guarantee for the rest of his life. This makes our self-interest a bit clearer. Here was a group of older people with a job guarantee for life, averaging, roughly, $7,000 annually, who were no longer productive because their positions were redundant. We did not enter into this project with only a sense of charity in mind. We were really being very practical about it. How should we use these people? Could we transform low-skilled blue-collar workers into clerical workers operating in a computerized system?

We established a pilot program in Newark, New Jersey, for a group of men who had been baggage and mail handlers and stevedores at Weehawken and in the general New York area. Interviews were held with all who were in this category and who were then redundant. We tried to identify those who were interested, and those who had some enthusiasm for our proposed program. If they positively declined to take this kind of training, of course we did not require it. Some, for example, chose to take their year's severance pay and resign.
We gave them a series of SET tests, devised by the Psychological Corporation. These include tests of numerical, verbal and clerical aptitudes.

Our normal acceptance is a grade of 90 out of a possible 200. Only four people out of the group scored above 90. So we changed the criterion of acceptance. We accepted for this program a low of 16 and a high of 159, and with this criterion a group of 22 volunteers passed. The rest of the story justified our, shall I say, lack of total respect for "normal" test scores.

The average age of the men selected was 50 years. They ranged from age 44 to age 57. The average educational level was ninth grade in school, and the schooling ranged from fifth grade to some college. Eighteen of the 22 came from minority groups, roughly 82 percent. Thirteen completed the 12-week program, and 9 did not. Of these 9, we were able to place 4 as trainmen in the New York area. So this gave us a plus of 17 out of 22.

The men were paid their regular wages while attending classes. They had three-hour sessions daily at the YMCA-YWCA in Newark. This was arranged through a contract between our company and the "Y". The three hours included an hour and a half of typing, which is most necessary for clerical jobs on the railroad. The other hour and a half included basic English, basic math, basic spelling, and indexing.

In addition, our own training staff took them for three hours a day at the station in Newark. In those three-hour sessions we covered per diem, demurrage, the handling of waybills, abbreviation rules (and these are peculiar to our computer language), office procedures (how the waybill must be handled as a car moves through the yard), telephone usage, preparing and delivering computer messages, and operation of the flexowriter. The flexowriter is a piece of equipment peculiar to the former Pennsylvania Railroad, used for computer input from the field. It functions, to some extent, like a teletype machine, although it performs three functions at the same time. This was not a simple retraining project: the jobs are complex as to content and they demand a high degree of accuracy in performance.

We provided follow-up for three weeks after the men had completed the 12-week program, for several reasons. We thought there might be some problem of acceptance of these men in their new stations. Keep in mind that some were from minority groups. I have to confess that we, like other industries, have pockets of resistance. We didn't know exactly what to expect. Also, these men were an older group, and we could visualize some young supervisor saying, "Don't send me any of those birds. I want young fellows in my office."
One of the most serious problems was the fact that under union contract provisions, some of the men already had seniority in the group into which they were moving. It was seniority stemming from 30 or more years of employment, but they had not been able to use it because they were not qualified for clerical positions. Now they were qualified and could use their accumulated 30-some years of seniority to take jobs away from other people.

We were involved in a considerable amount of overtime in the area because jobs were vacant, and this is one of the things that created our need to train. These men were going to eliminate some of the overtime available to the men who were already working.

Finally, there is a natural problem of transition, I believe, faced by a person who has been doing manual labor when he enters a clerical situation. You can't minimize the anxiety that might exist in that person's mind.

The results were good. We decided to do pretty much the same thing in Philadelphia.

Again we gave interviews to redundant employees, who also were in this age group. We administered the normal SET tests. There were 12 scoring above 90, and we had a range of 58 to 154 in the Philadelphia area. Thirty-nine people volunteered for the training. Unfortunately, one died, so our experience was with 38.

The average age of this group was again 50 years, ranging from 41 to 60. Their average education was 11th grade, ranging from 8th grade to some college. Twenty-six of the 38 came from minority groups. Of this group of 38, 25 completed the entire program.

We didn't lose any of these employees, however, because when it became apparent that some might not be able to qualify for yard clerical work, we immediately switched them, for the three hours per day that the company trained them, to other fields for on-the-job training. Of these, there were five who were discovered to be especially good at mathematics. We placed them in the revenue accounting department to learn how to operate calculators, Friden machines, Monroe calculators, and similar machines. Some of them moved into the ticket-selling office and teletype work. So we did not lose even one out of the 38 that we started with.

Instead of using the YMCA, we went to the Philadelphia Board of Education and made a contract to provide three hours of training similar to that given by the "Y" in Newark.
we added a new dimension in Philadelphia. Out of the 25, 25 had not graduated from high school. For the three hours that they were attending the school program, we geared the schooling toward the state examination for a high school diploma.

The company paid for the series of tests that they took at Temple University. The company paid for their text books. And out of the 25 people who took training to obtain a high school degree, 19 have so far actually achieved that objective. The Philadelphia School Board and Penn Central are especially proud of this because it is a very high percentage, according to the School Board.

Soon we start a similar program at Buffalo, New York. Here we are going to employ the services of Bryant and Stratton Business Institute to provide the three hours of basic training. We are getting a variety of experience with the types of institutions that provide such education. We are prepared to continue at other locations as the situation merits it.

Here are some of the conclusions that I think we can reach from these programs:

The number of truly untrainable people is very small. We uncovered the potential of a group of 50-year old people, mostly from minority groups, who had done physical labor most of their lives, and had not studied in 30 or more years of employment. Being able to make this group productive was an achievement, and it indicates to us that the number of people untrainable must be very small.

Another conclusion is that training is economically feasible and desirable. Let us look at the economics of this training program.

Thirteen men (all of whom became productive) completed the program at Newark. Four of those who did not complete were given productive jobs. We had 38 people in the Philadelphia class, all of whom became productive. At an average annual salary of $7,000, our wage cost for these men were something like $385,000 without the training. We probably spent about $10,000 to set up the training at Newark, and a similar amount at Philadelphia. The men are now performing needed functions for the company.

People in training divisions of big companies normally have a very difficult time justifying to hard-bitten supervisors the true economic value of training. You just can't tell a shop superintendent that by training an electrician you are going to make him any more valuable or return any more money to the company. But here is a case where we could very clearly show that we could return to the company in excess of $350,000 by supplying needed employees instead of "carrying" unneeded ones.
A most important factor is union acceptance of such programs. Our training projects would not have been possible without the valued cooperation of the Brotherhood of Railway, Airline and Steamship Clerks. They worked with us all the way through, they gave this project their enthusiastic support, and this is most necessary in any training program.

Finally, motivation is important in getting people to accept training. The very fact that a company is offering training provides motivation to some degree. Employees in a large corporation such as ours often feel that they are very much neglected, that the company doesn't know they exist. But when the company offers training, we found that motivation is stimulated, almost without further attention to this all-important psychological factor.
TRAINING GROUP II EMPLOYEES

COOPERATING SCHOOL OUTLINE

Typing - (1 1/2 hours daily)

General - (1 1/2 hours daily)

I Job Related Training

A. Spelling -
   1. City names
   2. State names
   3. Contents

B. Abbreviations -
   1. State names
   2. Words often used on waybills
   3. Contents

C. English -
   Identification of nouns and adjectives for application in determining contents.

D. Arithmetic -
   1. General addition, subtraction, multiplication, division, including fractions, percentages, and finding of averages.
   2. Specific application of subtraction to finding net weights.
   3. Specific application of addition to figuring continental time.
   4. Specific application of division to figuring tons from pounds.
E. Geography -
Location of the 48 continental states.
Location of principle cities and gateways on the Penn Central

F. Indexing -
Putting words in alphabetical order.

II Preparation for General Education
Development Testing for qualification of a high school equivalency diploma.

A. Mathematics
B. English
C. Science
TRAINING GROUP II EMPLOYEES

RAILROAD TRAINING OUTLINE

Three hours daily consisting of: Review; Quiz; Lecture and Practical Application.

A. Safety Rules (film)
B. General Conduct Rules
C. Appearance and purpose of various railroad equipment. (slides)
D. Standard procedure for reading, writing and speaking car numbers.
E. Railway Equipment Register
F. Car movements from shipper to consignee. (film - "Fast Freight")
G. Per Diem
   1. Definition
   2. Rates
   3. Importance of per diem
   4. Reducing per diem debit
   5. Avoiding unnecessary per diem expense.
H. Interchange
   1. Definition
   2. Interchange reports
   3. Importance of accuracy
   4. Relationship to per diem records.
I. Per Diem Reclaims
   1. Definition
   2. Procedures
J. Demurrage
   1. Definition
   2. Purpose
   3. Actual and Constructive Placements.
K. Switching
   1. Definition
   2. Examples
   3. Importance of intra-plant switching.
L. Use of Continental Time
A. Bill of Lading
1. Purpose
2. Two kinds - straight and order notify
3. Information shown.

N. waybills
1. Purpose
2. Distribution
3. Information shown
4. Freight charges - collect or prepaid
5. Reconsigning
6. Reading the complete route.

O. Car Movement Card (IBM or Flexowriter)
1. Purpose of card fields
2. Car initial codes
3. Kind of car codes
4. Contents abbreviations or codes
5. Abbreviation rules for customer names and city names
6. State abbreviations
7. Junction codes
8. Railroad codes

P. Yard Office Procedures
1. No Bills
2. Over Bills
3. Reconsignments
4. Protection of charges
5. Clearance for high and wide shipments
6. Correction of car numbers on waybills
7. Order-Notify shipments
8. Shipments "In Bond" for customs
9. Bad order cars

Q. Machine Training
1. Operation of IBM keypunch
2. Operation of Intercoupler card-to-card transmission
3. Operation of Friden Flexowriter

X. Miscellaneous
1. Use of telephone
2. Communications
3. Courtesy
4. Public Relations
S. Message Transmission

1. Address card
2. Time-line card
3. Crossover card
4. Header cards
5. Block cards
6. Detail cards
7. End-of-message card

T. Messages

1. Arrivals
2. Departures
3. Pick-ups
4. Set-offs
5. Advance consists
6. Shop moves
7. Patron moves

U. Field Trips

1. Yard
2. Car repair facility
3. Diesel Shop
4. Computer Center