

DOCUMENT RESUME

ED 318 899

CE 054 787

**AUTHOR** Littlefield, John F., Ed.; West, Sharon Crook, Ed.  
**TITLE** Correctional Training, Industries and Education. TIE.  
**INSTITUTION** Correctional Education Association.; Correctional Industries Association. Lexington, KY.; Eastern Kentucky Univ., Richmond. Dept. of Correctional Services  
**PUB DATE** 90  
**NOTE** 40p.; Papers presented at the Training, Industries and Education Conference (2nd, Cincinnati, OH, November 1989).  
**AVAILABLE FROM** Department of Correctional Services, Eastern Kentucky University, 217 Perkins Bldg., Richmond, KY 40475-3127 (\$10.00).  
**PUB TYPE** Collected Works - Conference Proceedings (021) -- Reports - Research/Technical (143)  
**EDRS PRICE** MF01/PC02 Plus Postage.  
**DESCRIPTORS** Adult Education; \*Correctional Education; Employment Potential; Federal Aid; Illiteracy; Literacy Education; \*Program Design; Theory Practice Relationship; \*Transitional Programs; Vocational Education; \*Vocational Evaluation; Work Experience Programs  
**IDENTIFIERS** Correctional Education Association; Correctional Industries Association; Workplace Literacy

**ABSTRACT**

This monograph includes the following seven papers: "The TIE (Training, Industries, Education) Concept--Moving from Theory to Practice" (Grieser); "Proposals for Prison Education and Training in Prison Industries" (Norris); "Implementation of TIE: Some Legislative Aspects" (Miller); "Federal Prison Industries TIE: An Update" (Muth); "Vocational Assessment and the Role of Vocational Programming in the Prison Setting" (Platt, Briscoe); "A Review of Federal Support of TIE: Yesterday and Today" (Miller); and "Illiteracy and the Workplace: Implications for the Education and Training of Offenders" (Coffey). Information on the Correctional Education Association and the Correctional Industries Association is also included. (The goal of TIE programming is to increase the skills and productivity of the inmate work force and to enhance the offenders' employability. The provision of comprehensive education and work programs should help to facilitate the offender's successful transition to the community.) (CML)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED318899

# CORRECTIONAL TRAINING, INDUSTRIES AND EDUCATION



U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

*Pam Lawrence*  
*Training Resource Center*

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A Cooperative Publication  
of the

Correctional Education Association  
and  
Correctional Industries Association

in conjunction with

Department of Correctional Services  
Training Resource Center  
Eastern Kentucky University

CE 054787



# Correctional Training, Industries and Education



Edited by

John F. Littlefield, Ohio Department of Rehabilitation and Corrections  
Sharon Crook West, Ohio State University

Published by

**Correctional Education Association  
Correctional Industries Association**

in cooperation with

**Department of Correctional Services  
Training Resource Center  
Eastern Kentucky University**

## Publication Staff

**Project Director  
Technical Editor  
Desktop Publishing**

**Bruce Wolford, Eastern Kentucky University  
Pam Lawrenz, Eastern Kentucky University  
Norma Bowling, Eastern Kentucky University**

## Printed By

**Kentucky Corrections Industries Print Shop  
Coffee Tree Road  
Frankfort, Kentucky 40601  
Phone: 502-564-4980**

# Correctional Training, Industries and Education

## About this Publication

In 1984, the Johnson Foundation and The Brookings Institution sponsored a series of meetings on prison industries at the Wingspread Center in Racine, Wisconsin and in Washington, D.C. The attendees included leaders in the field of corrections, business, law, labor, media, and academics. These meetings led to the formation of the National Task Force on Prison Industries. With the encouragement of Chief Justice Warren Burger and The Brookings Institute a list of principles and recommendations were published. The goal of the Task Force was to focus attention on prison industries and to start a national dialogue for improvement of the "factories within fences."

The first national conference on the concept of Training, Industries, and Education was held in Chicago, Illinois the following year, under the combined sponsorship of the National Institute of Corrections and the Illinois Correctional Association. Participants came from all sectors of the correctional, business, and legal communities for the first time to discuss the future of education and industry in the American prison systems. The dialogue had begun.

The second conference on Training, Industry and Education was held in November, 1988 at Cincinnati, Ohio. The presentations and workshops gave methods and examples of creating and fostering the partnerships between industry and education within the walls of correctional institutions around the United States and Canada.

This monograph includes 7 articles selected from manuscripts/presentations that were delivered at the Second Training, Industries and Education conference which was held in Cincinnati, Ohio in November, 1988. The conference was attended by over 350 Correctional professionals from the United States and Canada and was co-sponsored by the Correctional Education Association and the Correctional Industries Association.

This monograph and the two preceding conferences have attempted to focus the attention of correctional professionals on the importance of and benefits that can be derived from cooperative efforts among correctional education, industries and training programs. The articles included in this publication represent an overview of cooperative efforts among correctional training, industries and education programs.

If corrections ever is to achieve its goal of creating productive prisons that provide a positive atmosphere for change then there will need to be a cooperative TIE developed. We hope this publication provides correctional professionals with a useful tool to begin to establish a new TIE in corrections.

The overriding assumption of the integration and diversification of Training, Industries, and Education (TIE) within prison walls is best expressed by Chief Justice Warren Burger: "To put people behind walls and bars and do little or nothing to change them is to win a battle but lose a war. It is wrong. It is expensive. It is stupid."

The Editors  
John F. Littlefield  
Sharon Crook West

---

## Translating T.I.E.

- T.** Training includes vocational education, apprenticeship programs, on-the-job training, mentoring, inservice education and other employment skill enhancement efforts.
- I.** Industries includes correctional manufacturing and production and all institutional inmate work assignments, such as, maintenance, food, safety and sanitation services, agricultural and other support services.
- E.** Education include literacy, social/life skills, adult basic education, technical and post-secondary programs, as well as pre-employment education for inmates.

## **Correctional Industries Association**

Dear Reader:

It is with great pleasure that I am able to endorse the T.I.E. concept. I am equally pleased to join our distinguished colleagues from the Correctional Education Association in supporting the integration of two extremely important correctional programs. The combined advantages of training, industries, and education provide invaluable benefits to not only program staff, correctional managers and taxpayers, but most importantly to the incarcerated offender.

I encourage you to thoughtfully read these manuscripts and presentations presented here in order to grasp the true scope and total possibilities of implementing the T.I.E. concept.

I am sure you will join me in expressing our appreciation for both these comprehensive and informative articles and for the excellent production work that went into this publication. I want also to encourage your own comments as they relate to T.I.E. and urge you to attend the upcoming 1990 T.I.E. Conference in San Francisco in November, 1990.

Melvin L. Johnson, President  
Correctional Industries Association

---

---

## **Correctional Education Association**

Dear Reader:

The Correctional Education Association is pleased to join with the Correctional Industries Association in bringing you this collection of readings on T.I.E., the integration of training, industries, and education in correctional programming. T.I.E. symbolizes the cooperative efforts necessary to maximize both resources and the positive impact of programs on the offender.

As you read through the thought-provoking and informative articles included in this publication, we hope they will help you better understand and apply the principles of T.I.E.

Again, CEA is pleased to join with CIA in promoting greater cooperation and the T.I.E. concept. Thank you.

Gayle Gassner, President  
Correctional Education Association

# Correctional Training, Industries and Education

## Index

Title	Authors	Page
The TIE Concept—Moving From Theory to Practice	Robert C. Grieser	1
Proposals for Prison Education and Training in Prison Industries	William C. Norris	3
Implementation of TIE: Some Legislative Aspects	Neal Miller	8
Federal Prison Industries T.I.E. An Update	William R. Muth	10
Vocational Assessment and the Role of Vocational Programming in the Prison Setting	John S. Platt, Richard V. Briscoe	14
A Review of Federal Support of TIE: Yesterday and Today	Neal Miller	20
Illiteracy and the Workplace: Implications for the Education and Training of Offenders	Osa D. Coffey	24
Correction Education Association Application Form		28
Correctional Industries Association Application Form		30
Correctional Training, Industries and Education Monograph Order Form		32

---

## What is **TIE** ?

The T.I.E. (Training, Industries, Education) concept is based upon the principles of cooperation, integration and coordination. The T.I.E. approach provides opportunities for incarcerated offenders to work and to improve their academic, social, and vocational skills. Cooperative ventures which integrate educational programming with work and industry assignments require coordinated efforts with additional components of the correctional operation including classification, security, mental health and housing.

The goal of T.I.E. programming is to increase the skills and productivity of the inmate work force and to enhance the offenders employability. The provision of comprehensive education and work programs should help to facilitate the offender's successful transition to the community.

This definition was originally developed for the National Academy of Corrections, Prison Industry, Education and Work Seminar (July, 1988).

# The Tie Concept—Moving From Theory to Practice

Robert C. Grieser

## Abstract

*This article presents innovative programs in the United States, specifically within UNICOR. Current state programs will be addressed and state funded examples of TIE program integration will be given. The evaluation of TIE within the Federal system will also be discussed.*

I am pleased to have the opportunity to share with you some of the innovative programs taking place across the nation, and more specifically within UNICOR. My presentation today will be given in two parts. First, I will draw on some of my past experience working with the states to discuss a few of the state programs; and second, I will elaborate on the evolution of TIE within the Federal system. Let me begin with a brief background on the TIE concept for those of you who may be new to this area.

## I. History of the TIE Concept

Since the late-1970's, correctional industries has been regarded as a critical aspect of corrections. More recently, increasing emphasis has been placed on the importance of inmate education programs (as evidenced by Sen. Specter monies for education and Gov. Baliles "no read-no release" program in VA). With limited funds available for programs, a movement began to coordinate education and work programs rather than having them compete with one another as was often the case in the past. Competition among programs is both shortsighted and costly. Crowding, scrutiny by the courts, limited resources, and other realities of modern corrections have all contributed to the development of the TIE concept—the integration of training, industries, and education. Two years ago the first national TIE conference was held in Chicago; with its program devoted exclusively to the application of this concept.

## II. State-Funded Examples of TIE Program Integration

There are a number of examples of TIE program integration in the states. Several of these programs are grant-funded; but many are not. They vary in degree from formalized joint ventures to the most common type of interaction between industries and correctional education programs, i.e. the informal coordination of efforts. In nearly all cases, the principal "TIE", or linkage with industries, involves vocational education.

In several states, including California and South Dakota, joint ventures function in some institutions. These joint efforts involve industries providing raw materials for use by inmates in vocational education classes. The finished products pro-

duced in these classes are then either sold by industries or used in producing other products. Industry retains the profits from the venture; the instructor's salary may be paid for by either the vocational education program or by industries. New York State has experimented with a variation on this approach, whereby industries actually subcontracts with a vocational shop to take on production work on an overflow or as needed basis.

North Carolina has a cooperative arrangement between the women's prison and a local technical college that trains inmates in reupholstery; inmates spend a minimum of 3 months in training prior to placement in the industry-run shop. The state of Nebraska runs a comprehensive pre-employment training program for industry workers. Nebraska's training course includes orientation, industrial mathematics, measurement, reading blueprints, and safety considerations. The program is described in detail in an article published in the Winter '87 newsletter of the Correctional Industries Association.

In Michigan and Maryland, inmates employed in industries can enter apprenticeship programs to qualify as skilled workers and for union membership. Maryland has the largest program of this kind, with more than 150 inmates involved. The Michigan program includes additional training after working hours.

Job qualifications for Maine and a number of other states' prison industries include vocational training. In Washington State all job classifications have academic and vocational requirements. These are established in accordance with the Dictionary of Occupational Titles published by the U.S. Bureau of Labor Statistics.

Finally, some states like Ohio and New York, have moved toward the Federal model of integrating the management and financing of vocational and industry programs under one umbrella. While the particular model that is appropriate for your state may vary, the integration between education and industries is a workable concept that has grown rapidly and merits serious attention.

## III. UNICOR's Implementation of the TIE Concept

With this overview of the various programs operational in the states, I would like to turn my attention toward the TIE concept that has evolved in UNICOR.

The Bureau of Prisons believes that a productive inmate is much less likely to be a problem inmate, a philosophy that has a direct impact on UNICOR's approach to the TIE concept.

In working within this framework, UNICOR plays an increasingly important role in the overall operation of the Bureau's correctional programs. As of July 1, 1988, the total inmate population within the Bureau of Prisons was 44,215. Of that number 15,203 were employed by UNICOR. To give you an idea of the growth rate of the Federal prison system these numbers are expected to increase to 65,000 and 24,000, respectively, by FY 1992, an increase of nearly 50 percent over the next five years. UNICOR currently employs nearly 45 percent of the working population of the Bureau of Prisons. The working population is defined as the number of inmates available for work assignment of any kind.

In recent years there have been marked changes within the Bureau of Prisons in the relationship between industries, education, and training. Industries operated for many years almost independently of other institution programs. Work related training for inmates was mostly in the form of on-the-job training. Education programs were structured more to meet departmental needs and goals. Inmate training was usually in the form of vocational training, again seldom relating to other programs or inmate work assignments within the institution.

In 1983 with the long-range goal of more closely coordinating the efforts of the three areas, the education and inmate training programs were placed under the direction of the Associate Commissioner of UNICOR. This set the stage for a concerted effort to direct education and training programs toward a closer alignment with industries.

UNICOR's goal is to offer a pre-industrial training program for each of its 78 operations located in 43 different institutions throughout the country. Currently there are such programs in 35 factory locations—all funded by profits from UNICOR. These programs are developed jointly by the UNICOR and education department staff and geared to addressing the basics of industrial work habits as well as basic educational requirements relating to the inmate's future UNICOR assignment. The training program is designed to provide basic work skills through instruction and hands-on-application. Near the end of the training "live" work is performed by the inmates.

TIE programs, as with most new ideas or processes within the Bureau of Prisons, are first approved as a pilot program usually at the institution from which the idea or plans are submitted. The results are carefully documented over a specified time period, typically several months. If the desired results are indicated the program is usually approved for systemwide application.

In May 1983, the 6.0 sat requirements for UNICOR workers to progress beyond the entry pay level was implemented.

In that same year, a small number of UNICOR job classifications were earmarked to require an education level of GED. These were the higher paying jobs in UNICOR that required a more knowledgeable individual to insure successful performance. Some examples might be tool and die maker or certain quality assurance inspectors in our electronics operations.

In 1985 a new pay grade was established to compensate those inmates enrolled in pre-industrial training programs. The rate is 1/2 of the lowest standard pay rate for UNICOR workers or about 22 cents per hour. The training is usually for a period of two to four weeks after which the inmate is assigned to a job in UNICOR.

In July 1986, the 6.0 sat requirement for advancement to a pay grade was raised to 8.0, following the successful conclusion of a pilot program. Last year this concept was expanded further—with one location establishing the attainment of a high school diploma or GED as a pre-requisite for an inmate promotion to a Grade 1 (which is the highest level) assignment.

Through tying the inmate's ability to move into the better paying jobs in UNICOR directly to their educational accomplishments, an achievable and real incentive has been cre-

ated. These programs have resulted in higher enrollments and a higher completion rate in the Bureau's adult basic education courses.

The most recent enhancement to the TIE program has been the establishment of an Associate Warden (Industries and Education) at selected institutions. Under this program, the position (which was formerly Superintendent of Industries) has full responsibility for the industrial and educational programs, including inmate training, at their location. This concept, now operating in 18 sites, has made for even more closely coordinated integration of these functions.

These are but a few of the training and incentive programs offered to inmates working or planning to work in UNICOR. Suggestions for new and innovative programs from both staff and inmate workers is encouraged. In order to foster the productivity and quality standards essential to the continued success of UNICOR, it is necessary continue to search out avenues that can be successfully integrated into the industrial program.

While UNICOR has come a long way toward integrating the training, industries, and education components of its correctional program, it is important to mention a few words about the financing of these programs. UNICOR has experienced some cashflow difficulty over the past several months. This has primarily been due to problems of strained financial resources as they attempt to keep pace with the rapid need for expansion. In 1987, a total of \$7.2 million was allocated to fund pre-industrial, vocational, and experimental training programs. Presently there is some discussion among Corporate management and the Bureau leadership as to whether and to what degree past levels of financing for education programs can continue. Whatever the outcome, the benefits of coordination of training and industries have been clear, insuring that Federal support for the TIE concept will continue well into the future.

---

## Biography

Robert C. Grieser is currently Internal Programs Manager with UNICOR Federal Prison Industries. Mr. Grieser has had 13 years of research and management experience at the federal, state, and local levels. As Director of Operations for the Institute for Economic and Policy Studies, he directed numerous studies on prison industries, jails, and corrections education. He was the Project Director on a multi-year NIC study to document and evaluate a \$4 million Congressional funding initiative in corrections education.

Formerly the National Program Coordinator for the Department of Justice TA program on Strategic Planning for Industries, he has served as a consultant to the Tennessee Dept. of Correction on a court-ordered job evaluation, and completed industry marketing studies for the states of New York and Maryland. Both the New York and Tennessee work involved recommendations for linking educational programs with industry. He has published numerous articles on prison industries, and has been a member of the Board of Directors for the Correctional Industries Association since joining UNICOR in 1988.



# Proposals for Prison Education and Training and Prison Industries

William C. Norris

---

## Abstract

*This article presents remarks given by William C. Norris, founder and Chairman Emeritus of Control Data Corporation and Chairman of the Board of the William C. Norris Institute at the Training, Industries and Education Conference.*

---

It is a pleasure to participate in your conference and discuss proposals for prison education and training and prison industries. I have been concerned with those areas for more than 30 years.

During 28 of those years, I was chief executive of Control Data and intimately involved with a number of prison programs. The largest was Plato Computer-based Education and Training which commenced in 1975. The first sale of Control Data's Plato program, Fairbreak, was to the Minnesota State Prison at Stillwater. Through the years, the late Al Maresh, who was a pioneer in correctional education, was a strong proponent of computer-based education and a good friend to Control Data and its Plato system. Today, some 23 states and over 100 institutions are using Plato, and almost every state is using computer-based education in some form in their education programs.

In addition to its Plato Computer-Based Education Program, Control Data, from its earliest years, has employed released prisoners. Also, at one time, 150 inmates were building important parts of computer systems for Control Data in the Minnesota State Prison. Control Data was very much involved in launching the insight program, which has helped 42 inmates receive college degrees while in prison. Funds to do this are earned through a telemarketing business that does \$30-50,000/per month in revenue. Another Control Data program had inmates teaching programming via a terminal to homebound handicapped employees.

These projects taught us many things about inmates—although they need education and training, coping skills and job skills. Once educated, once socially adept, once trained, they can be a powerful workforce. In our four years experience, inmates met or exceeded our company's standard for performance almost every month. There are tens of thousands of men and women sitting idle in this nation's prisons who could be doing the same.

Control Data was a strong partner with Chief Justice Burger in his program of trying to change America's prisons

from warehouses to factories with fences. The fact that not much progress has been made in reaching his goals should only cause us to re-double our efforts in that regard.

Only one program, called Wheels wasn't successful. It had the objective of providing automobiles to released prisoners. In Minnesota, especially in the winter time, the availability of a dependable automobile increases options for securing and keeping a job. Thus, Control Data established Wheels, which made available cars from Control Data's finance subsidiary, Commercial Credit. Its vehicle leasing division had a large number of used cars in good condition which were leased at competitive rates to ex-convicts who were obviously not credit worthy.

After about a year, Wheels was progressing nicely in that an important need was being served and loan repayments were current. Feeling that the program was on track, I took my eye off of it.

Soon thereafter, the manager left for a better job, and the division executive responsible for Wheels replaced him with one of the participants in the program. You can surmise the next chapter—an opportunity for a fast buck was irresistible and a sizeable embezzlement wiped out the funds allocated to the program which then had to be cancelled.

During my tenure as CEO, I shared in some non-catastrophic, humbling mistakes. Wheels took the prize for that category. Even though its demise was painful, out of the ruins of that program rose some important lessons. In our rush to solve the problems which beset those who have been incarcerated, we cannot leave them to their own devices with the hope that they will do good. Those who have been in such serious trouble as to land in prison need tight controls on them at release, until they can show that they are ready for increased responsibility and trust. The Wheels program would have been going today had we not lost sight of that important lesson, because the basic concept of the program was sound. My interest in prison programs was not diminished by the experience and has continued as strong as ever after I retired and assumed my new role as Chairman of the William C. Norris Institute.

Meanwhile, the resources required to make significant progress in prison programs, especially in education and training and prison industries have grown enormously as a result of advancing technology the ever-increasing number of people being sent to prison and the continuing stream of functionally illiterate young people pouring out of our schools. The latter is happening at a time when the number of unskilled jobs is declining, and those available are often unattractive to younger people, and skilled jobs go unfilled because of lack of qualified applicants.

You know that litany as well as I do. You and I also know that the deficiencies of our school system and the relentless and rapid pace of technological advances which are eliminating lower skilled jobs are intertwined with problems you face in inmate education and training and providing meaningful prison jobs. Consequently, those problems cannot be solved by individual prisons; and efforts toward solutions, inside and outside, so to speak, must proceed hand-in-hand.

Furthermore, special programs are not the answer either, because making the required improvement in education and training and increasing productive work opportunities in pris-

ons requires resources far beyond what realistically can be obtained for them. The staggering federal budget deficit, trade deficits and the serious and inadequate attention to the problems of other groups, such as those of the handicapped, disadvantaged minorities and the aging, makes it unlikely that federal legislation could be enacted at this time, to provide significant funding specifically aimed at helping prison populations. Hence, these prison problems must be solved in conjunction with programs which can command congressional support. Currently the eroding competitive position of the U.S. in world markets is of common concern because most Americans face a lower standard of living without improvement in industrial performance, and there is a growing awareness of the threat.

Consequently, this issue has the attention of Congress. Some legislation aimed at improvement has already been passed, and more will be considered in the next session; which leads me to believe that the two major programs I will review today addressing competitiveness will be supported by legislation. One is for improving education and training, and the other is acceleration of the utilization of advanced manufacturing technology. Both bear directly on prison education and training and prison industries, as I will relate to you after reviewing the programs.

## WCNI

Before doing so, I should comment further on the William C. Norris Institute and on competitiveness of the U.S. in global markets.

In the simplest of terms, the mission of the Norris Institute, which is a non-profit corporation is to catalyze public/private cooperation to address major unmet or poorly met societal needs. The only way these will be adequately met is through cooperation to more efficiently utilize our scarce resources.

However, in American society, we have yet to establish a culture of cooperation—we are more prone to compete among ourselves than cooperate. This tendency isn't the exclusive province of any one sector, it applies to industry, state and local government, education and community organizations. As a consequence, it usually takes a catalyst to get organizations to cooperate to the required extent, and that is a major function of the Institute and the role it is playing in the programs to improve education and speed up the use of advanced manufacturing technology.

## U.S. Competitiveness

Further, with respect to competitiveness, it is important to note that over 70% of our domestic market is exposed to foreign competition. Consequently, our standard of living will, to a large degree, be determined by how well we do in competitive battles. Unfortunately, we are losing them in many markets.

The 1985 report of the president's commission on industrial competitiveness provided a good perspective of the foreign competitive challenge. It warned that our ability to compete was eroding, and that we were losing world market share in industry after industry, including seven out of ten high technology industries.

In spite of the warning signals, the trends flagged by the president's commission have continued, although during the first half of 1988, there has been a decline in the rate of erosion in a number of high tech markets, mainly because of the devaluation of the dollar. However, this favorable trend can be wiped out by a rising value of the dollar and/or aggressive programs for accelerating adoption of advanced manufacturing technology to reduce costs which are being implemented by foreign countries, particularly Japan.

Adverse effects of the loss of market leadership in high tech are not restricted solely to reduced trade and loss of jobs in high tech companies. They are felt much more widely because high tech products, such as microcomputers, are used to improve the performance and quality and lower the costs of products, services and processes in other industries. Hence, these industries, which represent a large segment of the economy, are placed at a severe competitive disadvantage when they do not have the same access to the most advanced high tech products as their foreign competitors.

Of further concern is the much greater utilization of advanced manufacturing technology in Japan, as compared to that in the U.S. Yet, only three months ago, the U.S. Congress Office of Technology Assessment issued a report stating, and I quote, "Many U.S. industries have fallen behind foreign competitors in manufacturing technology. The weak performance of American manufacturers is one of the most important underlying forces behind the large trade deficits of the 1980s. The United States has to improve its manufacturing performance if it is to prevent further erosion in living standards." End of quote. Of course, this isn't new information—just a replay of a myriad of articles published during the past five years warning that most American companies are moving too slowly in adopting advanced manufacturing technology.

Improving this dismal situation is a gargantuan task. As noted earlier, essential to its accomplishment are cooperative programs which will provide:

- (1) Better K-12 and undergraduate education to assure well prepared entrants to the workforce and continuous reskilling of the workforce; and
- (2) Access to advanced design and manufacturing technology by small businesses to significantly improve quality, reduce cost, increase flexibility and reduce time to get new products to market.

## Education & Training

In education and training, the cooperative program focuses on utilizing a new approach which provides personalized learning for each student and the means to achieve full individual potential. It is based on the use of computer technology as the primary mode of delivery for K-12 and undergraduate education. This, as opposed to the way it is currently being used, which is add-on or supplementary to traditional methods. Experience has shown that just adding on to or modifying the present system will not produce the desired results.

In the primary mode of delivery, the computer is used to disseminate information and knowledge, serve as a laboratory device, manage instruction, conduct tests and generate reports. This frees teachers of inefficient, traditional lecturing,

testing and record keeping; hence, they have more time to devote to meeting the needs of individual students.

At this point, I should give you my definition of a computer technology-based education system. Essentially, it contains four elements:

1. computer-managed instruction
2. computer-assisted instruction
3. computer-assisted testing
4. computer-generated administrative reports

Further, according to my definition, a computer technology-based system includes audio, television, interactive video, graphical displays, simulation, animation and other learning technologies and materials, all managed by computer.

Goals of a computer technology-based system include improved learning outcomes and leveling off of the ever-rising cost of education.

**K-12:** Let me now describe the K-12 part of the education program which the Norris Institute is planning for implementation through cooperation involving the institute, K-12 schools, businesses, state governments and foundations. At its foundation and one of the underlying premises is the full implementation of an individualized computer technology-based approach. This is accomplished in a series of steps.

The initial one is to establish new schools to avoid resistance to change by existing institutions. These can be new schools within existing schools, or they can be free standing.

A primary feature of the new school is the technology core, consisting of the computer equipment, software and courseware. It will essentially be the same for all participating schools in order to achieve the best learning outcomes at the lowest cost.

Further, with respect to planning, each school will incorporate the following:

1. a personalized education plan for each enrollee;
2. local professional staff, trained as diagnosticians, prescribers and learning facilitators;
3. the provision and utilization of computer-based education equipment and learning resources to operate both computer-managed and computer-assisted instruction;
4. computer-managed learning environment, including programs to diagnose, to prescribe and to evaluate individual students;
5. incorporation of mastery and standardized testing;
6. continuous progress monitoring and more frequent reporting;
7. computerized administrative and other non-instructional processes and services.

The education format and program that will be utilized in the school is built around individualized education, where each learner has a learning plan. The learner follows the learning plan at a rate and pace appropriate to individual capabilities.

Teachers using the new format will function as diagnosticians and facilitators of learning. With the aid of labor-saving computer technology, teachers are freed from the traditional group learning restrictions to work with individual learners and with small groups.

Although the K-12 program is planned to be nationwide, initial implementation efforts have thus far been mainly cen-

tered in Minnesota. There is strong interest by 15 schools in joining a consortium which will oversee the selection of the most effective existing courseware and the development of additional courseware, as well as accelerating the transition to computer technology as the primary delivery method. Early next year, membership of school in other states will be sought. A startup date of September '89 has been chosen by a few schools; however, the majority have set it for September 1990.

**Undergraduate Plan:** For undergraduate education, a similar plan would be followed, in that segments of four-year college curriculum would be selected, such as teacher training and the engineering fields of new materials and advanced manufacturing. Four-year schools offering these curricula would be established within existing colleges or universities. Of course, free-standing schools would also be set up where appropriate. All courses for the entire four years would be delivered, to the maximum extent feasible, with computer-based technology.

There is a considerable amount of computer-based lesson materials, i.e., courseware, available for the first two years of an engineering curriculum. However, most of the courseware for the last two years has to be developed. This is a large undertaking. Cooperation among a number of universities is necessary to assure that the computer-based courseware is prepared by the leading professors in each subject. There is strong interest in the undergraduate education program, and it is planned that a consortium of 20-25 universities to develop courseware will have been formed by December 30th.

Let me pass on comments made by faculty members of several universities as to why they want to join this type of effort. These comments are also relevant to K-12 education. They include:

- flexibility of individual, self-paced learning providing more effective educational experience for the student;
- the capacity of new technology to take the student beyond the experience of what can be brought into the classroom or laboratory physically or cost-effectively;
- the interactive experience for the student with new technology;
- the ability of the instructor to monitor each student's learning, to manage the course more effectively, to provide for a variety of learning modes;
- the creative challenge of discovering what can be accomplished with new technology;
- developing the courseware individually is prohibitive, but given the cost of courseware and hardware, faculty are interested in working with a group of professionals to speed up their learning curve about TBE;
- concern about attracting effective faculty members for expanding teaching positions.

Finally, with respect to the computer technology-based education system, let me emphasize that in addition to assuring better prepared entrants to the workforce, it will be able to provide continuous reskilling of the existing workforce.

## **AIMSC**

This cooperative program for providing access to advanced design and manufacturing technology by small busi-

nesses is called the Advanced Integrated Manufacturing Services Center (AIMSC) partnership. It is a nationwide cooperative program for accelerating the widespread utilization of computer-aided design and computer-integrated, flexible manufacturing systems.

The major impetus for the program is simply, as noted before, that U.S. industry is not getting advanced manufacturing technology in use soon enough by either large or small companies. This is particularly serious for small business because of its important role in manufacturing and advancing technological innovation.

There are many reasons for this condition. They include the reluctance of many manufacturing companies to accept the gravity of the threat from overseas; the lack of common standards to guide the compatibility of enabling technologies and their assembly into coherent integrated systems; the low level of relevant technical capabilities in most manufacturing companies; the high cost of equipment, computer software and training; difficulty in determining the risk and quantifying return on investment, which must take into account factors other than the traditional reduction in direct labor. These factors include increases in efficiency, effectiveness and overall competitiveness. Aside from risk and return, most medium-sized and small companies simply can't afford the necessary capital outlay.

The only practical approach for adequately coping with these formidable barriers to get advanced manufacturing technology in widespread use soon enough is to place in operation a nationwide network of six regional computer-aided design and computer-integrated flexible manufacturing centers. Regional centers would serve local centers in a number of states. A tentative regional grouping of centers is shown by the slide. They would perform design and manufacturing on a service basis where companies pay for the service as it is used with no investment required in the regional facility. Each company would utilize the center through a workstation on its own premises connected by a telephone channel.

An advanced integrated manufacturing service center (AIMSC) would have the capability to manufacture a wide range of products of the highest quality, lowest cost in the shortest possible time and in small quantities. Given access to that kind of facility, U.S. companies, even small companies, could compete over a wide range of products with the largest companies worldwide. Without it, however, small manufacturing companies will find it increasingly difficult to compete, because foreign competition is not standing still.

The initial cost of a regional center network, including six local centers, is estimated to be \$70 million. Additional local centers will ultimately be required. The cost of local centers will vary, being determined by the parts and products to be manufactured. A local center, focused on machining parts, can be established for \$3-5 million dollars; whereas, a center for electro-mechanical assembly would require an investment of \$10-12 million.

It is appropriate that the initial cost be shared by federal, state and local governments and companies. Because of cost savings and other benefits, such as surge capacity in case of a national emergency for our armed forces, it is proposed that the federal government underwrite 75% of the cost. Legislation will be required to provide this level of funding. There is

a precedent for such action. Earlier this year, the Department of Defense committed \$500 million to Sematech, a joint government-industry program to help improve U.S. competitiveness in computer memory chips.

Finally, there is substantial and growing interest in AIMS centers. I believe that at least four will commence operation next year.

### Prison Industries

Having described the nationwide programs in education and advanced manufacturing, I will now relate them to the needs of prisons.

With respect to prison industries, it is proposed that part of their program in the future include the operation of local AIMS centers. They would be established in prisons through a cooperative approach between prisons and their local communities.

The centers would provide computer-aided design and advanced manufacturing services and training to small businesses on a fee basis. The centers would be staffed with inmates and representatives from small businesses—the latter being there primarily to receive hands-on training and are not permanent employees.

Selection of the type of AIMS center, i.e., materials forming, electronic circuit assembly or electro-mechanical assembly, would be made after a survey of the needs of small companies in the surrounding area.

Cooperation in establishing and operating a center between prisons and their local communities is highly desirable in helping to assure that the center is most responsive to business needs. A non-profit corporation should be set up as the organizational vehicle. Initial funding would be shared by federal and state government and the local community. Once the center is in full operation, it can become self sustaining through charges for its services.

### Improved Prisoner Education & Training

The approach for improving inmate education and training is similar to that proposed for prison industries, in that it would draw extensively on the corresponding nationwide program. More specifically, prisons would utilize the personalized computer technology based delivery specified for the national program including a personalized education plan for each enrollee and the technology core for the delivery.

In addition to helping assure the best learning outcomes at the lowest cost for participants while in prison, this plan has other advantages. One is the much greater diversification in the courses offered which can be achieved by simply acquiring courseware which is utilized by the national program. There is also the opportunity to participate in courses offered by universities via computer terminals in prisons.

Another, and very great, advantage is that of providing the means for the efficient continuation of progress by an inmate toward the goals of his learning plan which were not completed before release from prison. The learning plan of an individual can easily transferred from the prison computer to another one outside. Thus, there is no ambiguity over the status of student performance vs his or her plan.

There is also the potential for a much more productive relationship with the business sector, which will find it increasingly difficult to obtain employees with the required skills. Small companies will be particularly hard pressed and handicapped—more so than large companies. Small companies can't afford employee training; whereas, large companies can and do provide a considerable amount of in-house training.

Thus, it is feasible for prison education and training to become much more closely linked with small businesses to meet their skill needs. Inmates would be selected with the interest and aptitude who, if provided with the necessary skills, would be employed by identified small companies upon release. After employment the ex-prisoner would be able to complete any unfinished courses and/or get additional training from the prison system which would enhance his value to the small company employing him.

It is clear that a prisoner who has the assurance of a job upon release, providing the necessary qualifying skills have been acquired, will have greater motivation to obtain them than would be true without that assurance. Furthermore, the small company is much more likely to get a productive and permanent employee, especially where that employee has access to further education and training.

### Conclusion

In concluding, let me note today that if I had my druthers, I would have proposed significant programs for improving prison education and training and expanding prison industries, which could be implemented in a relatively short time and require a modest investment. Unfortunately, we are living in an era where our society has neglected urgent social needs, which are becoming massive in size, and necessary long-term investments are not being made to improve industrial competitiveness. Consequently, there are no significant, modest short-term alternatives which will make a significant difference.

Therefore, the improvement so urgently needed is, for the most part, only available through nationwide large scale long-term cooperative programs. At first glance, it might appear that it would be difficult for prison education and industries' executives to become involved in the planning and implementation of a large scale cooperative effort. However, that is not the case. Furthermore, your help is needed in planning and developing grassroots support for these large scale nationwide programs.

For those who are interested in participation in the AIMS center program, my institute can furnish information on how to work with your local community to plan and implement an AIMS center.

With respect to education and training, information on the technology core for K-12 can be furnished early next year. This information will be sufficient to commence planning an individualized technology-based prison school in cooperation with a local public school, which could become operational in 1990.

Let me end my talk with another reminder of the serious challenge of foreign competition. We need to improve our productivity in every conceivable way, if we are to avoid further erosion in our standard of living. The hundreds of thousands

of people in prisons are not only lost as contributors to a more productive society, but worse, our prisons are a burdensome cost. For the sake of the incarcerated and the rest of us, we must do better in bringing those people into productive roles in society.

A better education system is sorely needed to help reduce the number who fail to acquire the skills necessary to make a decent living without resorting to crime and, of course to upgrade skills throughout our society.

The education program I've proposed is a giant step toward that goal; which, in turn, along with the advanced manufacturing program, will significantly boost competitiveness. Both programs are long term, difficult and require an unprecedented degree of cooperation. Yet they are affordable and doable. I hope that we can all dedicate ourselves to their implementation.

---

### Biography

William C. Norris is the founder and Chairman Emeritus of Control Data Corporation and Chairman of the Board of the William C. Norris Institute.

### WHAT DOES THE CIA DO?

Promotes the establishment, development, and improvement of correctional industries programs, with the cooperation and assistance of various public and private agencies.

Provides for the professional development of its members through effective training programs provided by the association and other supportive sources, public and private.

Encourages innovation in industries programs by seeking grants and other financial assistance for strategic planning purposes and to support activities that can have positive, global implications.

Serves as a clearing house for the exchange of ideas and technology among its members and interested parties.

Aids in furthering the constructive employment, training, and education of the thousands of incarcerated offenders who, as a result, may be better prepared for their inevitable and eventual return to the open society.

# Implementation of TIE: Some Legislative Aspects

Neal Miller

## Abstract

*In the absence of examples of state legislation specifically directed at the establishment of TIE programs, the paper sets forth examples of state laws indirectly encouraging TIE-like program elements. An analysis is accomplished of common state laws that indirectly inhibit the establishment of TIE through weakening the programs making up TIE, e.g., industries, education, and training. From the TIE literature, recommendations are made for legislative approaches to facilitate the establishment and operation of TIE programs.*

The Department of Corrections' ability and willingness to implement TIE is affected by many legislative mandates and restrictions. These provisions may be beneficial in easing TIE implementation, or they may be negative in delaying TIE.

### Positive Legislation

There are virtually no examples of legislation mandating the implementation of TIE. The nearest one comes to such a law is exemplified by Ohio 5120.43 requiring the wardens to "develop such occupations . . . but without prejudice to the . . . education (of) inmates." A less common provision is legislation in a few states requiring that education and training programs be available after working hours for inmates in institutional work programs, including Industries. See, for example:

Illinois Ch. 38, Section 1003-12-3 requiring the DOC to establish vocational training programs in conjunction with its Industries, to be scheduled outside working hours; Section 1003-8-3 requiring that all work and education assignments be pursuant to a social evaluation of the inmate;

New Mexico 33-8-9 requiring that non-Industries programs be available to inmates working in Industries and that they be available in nonworking hours.

Other legislation may encourage the implementation of TIE without doing so explicitly. For example, legislation may mandate both the establishment of an Industries program and require inmates to have attained a minimum educational level before being employed by Industries. Examples of such laws include

Hawaii 353-64 conditioning parole eligibility upon successful participation in academic, vocational or industry program; Indiana 11-10-8-3 requiring inmates to meet minimum literacy standards to be eligible for participation in minimum security

release program;

Tennessee 40-28-115 limiting parole eligibility to those inmates passing basic skill tests.

Yet other legislation may implicitly encourage TIE by referencing the post release employment related goal of the education program. Examples of this type of law include Nevada 209.369 requiring that education programs take account of both the educational needs of inmates and their opportunities for employment in the free society; New York Correction Law section 136 establishing similar goals. No examples have been found of the Industries counterpoint to these Education statutes, which would mandate some industries responsibility for educational achievement.

A final category of laws that indirectly encourage implementation of TIE are laws establishing safety and health requirements for workers. These laws have been recently amended to require greater training among the workforce in safety problems and response measures. Given the recurring nature of the required training and the high worker turnover which makes in-service training very costly, the obvious solution is for vocational programs to provide the needed safety training.

### Negative Legislation

Just as there is no legislation mandating TIE, so too, there is no legislation that prohibits the implementation of TIE. Two types of inhibiting laws are seen to exist: those that place organizational blocks upon TIE, and those that establish operational mandates which serve as disincentives to TIE.

Legislation that establishes several organizational structures or mandates within the DOC for Education and Industries may make cooperation between them difficult to achieve. For example, the establishment in law of separate and equal divisions within the DOC for Industries and Education may develop into separate fiefdoms that rarely communicate with each other. Where this occurs, it will need the intervention of the head of the DOC to require all DOC divisions cooperate to establish TIE. The placement of both activities within the same organizational structure may not succeed in ensuring cross program communication needed for TIE since such placement merely moves the level of the problem away from the DOC director to a division director who may not have the authority, experience or individual initiative to direct the needed cooperation.

Legislation establishing differing divisions may place differing priorities for them, thereby reducing incentives to cooperate through TIE. For example:

North Carolina 148-22.1 places priority for education upon serving those inmates who are less than 21 years of age with sentences of between six months and five years before parole eligibility.

Other legislative provisions locating correctional education responsibilities in non-DOC agencies will have unpredictable results. One problem likely to occur will be difficulties arising from the absence of regular intra-agency communication paths such as assistant director meetings. In this context the more likely occurrence is for TIE to be implemented on an institutional rather than agency wide basis. Examples of non-DOC agency responsibilities for education include Louisiana R.S. 17:3351 (B) (3) authorizing state educational

institutions to develop curricula for inmate education courses; Alabama 14-12-1 authorizing the state department of education to establish and operate schools at correctional facilities; Idaho 33-123 requiring the state board of education in cooperation with the DOC to prepare inmate education courses.

Another non-DOC agency structure involved in correctional education is the advisory or coordinating council. Depending upon the scope of its authority or influence, such a group may facilitate TIE. On the other hand, such a group may exhibit signs of parochialism for education without consideration of the Industries role in preparing inmates for return to the community. Examples of this structure include Florida 944.19 establishing a Council on Correctional Education.

Maryland 22-101 establishing an Education Coordinating Council within the Education Department and which supervises the DOC Director of Education.

Not surprisingly, there is a dearth of information about the role of these legislatively created bodies and how they respond to the TIE concept.

It is also true that legislation weakening the powers and responsibilities of either the Industries or Education divisions may also work against TIE. For example, the ability of Industries to participate in TIE may be dependent upon its fiscal solidness (i.e., profitability). Legislation limiting its fiscal base such as prohibitions upon sales may have adverse consequences for TIE, which may have some one-time costs for its implementation that can not be absorbed by an Industries program that is only marginally profitable.

Similar problems may result from laws requiring Industries to develop programs that match existing work demands in the private sector. Leaving aside the issue of making compatible the practical political problem of avoiding competition with the private sector as much as possible, such a mandate also ignores the truth that employers are more concerned with work habits such as coming to work on time or accepting the supervisory demands/getting along with co-workers than with specific skill training. Industries training often can not be a direct preparation for free world training. In contrast, no such inhibitions exist for vocational training. Hence, integrating the two through TIE may entail difficult communication problems explaining this distinction.

Other compatibility problems may also be pointed out. The most common such problem is legislation establishing differing wage rates for inmates in Industries and in other programs. That program with the highest wage rate is more attractive to many inmates who would benefit from participation in the lesser paying program.

### Conclusions and Recommendations

There are no legislative panaceas that would immediately lead to TIE implementation or even remove most of the roadblocks to its success. The reality that we face is a mix of ambiguous laws that may be interpreted to favor TIE with a group of other laws that actively work to create disincentives to TIE. What is needed then is

- mandating any particular version of TIE to be implemented (e.g., prioritizing of goals);

- elimination of laws that encourage bureaucratic resistance to TIE whether that resistance be from inertia, "turf" or other reason;
- repeal of other laws that inhibit Industries from supporting TIE, especially those laws that limit its ability to develop earnings to pay the costs of implementing TIE;
- enactment of laws that encourage TIE, such as evening scheduling of education programs for Industries workers;
- enactment of laws supporting TIE members such as laws encouraging increased earnings for Industries or which provide incentives for inmate participation in Education.

As we prioritize our efforts, the significance of legislation for TIE is unclear. Where the DOC director is firmly committed to the TIE concept, the need for new law is not great. Where the director is opposed, new legislation is unlikely to move his or her views. It is in the middle, where opinion is still unfixed or political support for TIE is unknown that legislation can make a significant difference. Additionally, enactment of legislation that encourages program development of Industries or Education can make a difference in the ability of the TIE partners to fully participate in TIE.

---

### Biography

Neal Miller (an attorney) has 17 years of policy-research experience in corrections programming, specializing in post release employment. During the past decade with the Institute for Economic and Policy studies, he has become one of the leading experts on correctional industries and has published over a dozen books, articles and reports.

---



# Federal Prison Industries T.I.E. An Update

William R. Muth

## Abstract

*This paper is the summation of a presentation made at the Correctional Training, Industries and Education Conference in Cincinnati, Ohio in November, 1988. The article covers four recent initiatives in the Federal Prison System: The mandatory literacy program, the GED pilot program in the Southeast region, pre-Industrial training and the post-release employment study.*

## Introduction

Creating educational policy in a correctional system is a task that requires perseverance and patience. Philosophies and opinions about why, what and how we teach convicted felons are in a state of continual flux. The roles of vocational training, social and post-secondary education, leisure-time courses and other correctional education programs advance and retreat, are defined and redefined, are sometimes emphasized and sometimes not.

Fortunately, there has emerged over the past ten years a program with a broad base of acceptance: literacy. This paper will contrast the steady building of the Federal Bureau of Prisons' literacy policy with the complex, preliminary results of the post-release employment survey and the rethinking of our pre-industrial programs. The Bureau of Prisons (BOP) literacy policy is clear, consolidated and progressive. The BOP vocational, pre-industrial and pre-release programs are more complex and diverse in scope, and recent experiences in occupational training have given us promising new perspectives in these areas.

## Literacy and Adult Basic Education

Adult Basic Education (ABE) Programs in the Bureau of Prisons have progressed in a linear way for the past decade. (See Table 1). Moving on Chief Justice Warren Burger's mandate in 1981 to provide opportunities for every inmate to be literate and have a salable skill upon release to society, the Bureau implemented a series of policy changes in ABE. (See Table 2). In May of 1982 the Bureau published its first mandatory ABE policy. This policy required inmates to stay in school for at least 90 days if their academic achievement test battery scores were below a 6.0 in any subtest. It also stipulated that inmates could not be promoted beyond the lowest grade of pay at work unless they completed ABE.

Table 1

### Federal Prison System ABE Program

Fiscal Year	New Enrollments	Completions	Comments
1981	2,653	1,441	
1982	3,785	1,983	6.0 Policy
1983	6,004	3,774	
1984	6,896	4,909	
1985	8,048	5,221	
1986	11,471	5,329	8.0 Policy
1987	12,000 (Est.)	6,500 (Est.)	

Source: Federal Bureau of Prisons Inmate Program Reporting System Data- Fiscal Years 1981-1986.

Table 2

### Chronology of A.B.E. Policy U.S. Bureau of Prisons

1. May 1981	Warren Burger Speech at George Washington University School of Law
2. November 1981	Bogan Task Force
3. May 1982	A.B.E. 6.0 Policy
4. October 1983	Qualified Reading Specialist or Special Education Instructor at Each Institution
5. July 1985	A.B.E. 8.0 Pilot Northeast Region
6. July 1986	A.B.E. 8.0
7. November 1987	GED/ Grade 1 Pay Pilot Southeast Region
8. January 1989	GED/ Grade 1 Pay Policy
9. January 1990	GED/ Grade 2 Pay Policy (Proposed)

Source: Federal Bureau of Prisons Policy Statements; Federal Bureau of Prisons Education Branch Archives.



In 1986 the standard of literacy was raised from 6th grade to 8th grade proficiency in reading, language and math skills; any subtest score below 8.0 would be sufficient to require Adult Basic Education.

In December 1988, we will conclude a GED pilot in the Southeast Region whereby inmates must complete their GED (or have a high school diploma) in order to advance to top paying (grade-one) jobs. Because the experiment was accepted readily by staff as well as inmates, the GED grade-one contingency will be implemented nationwide on January 1, 1989.

In the near future the BOP will pilot the requirement that inmates must achieve their GED's in order to be promoted to grade 1 or grade 2 jobs. Our long term goal is to require inmates to achieve GED's in order to be promoted beyond entry level pay-grades in all work assignments. The systematic process of piloting higher literacy standards incrementally has been non-obtrusive and very effective. It will be the method of choice until the standard of literacy includes the successful completion of the GED examination. Should this, then, be the upper limits of the definition of literacy? Perhaps not.

### Pre-Industrial Programs

Pre-Industrial programs (P.I.P.'s) were first established in the BOP in the mid-1960's. At that time UNICOR (Federal Prison Industries) was receiving up to 40% of all new commitments to the prison system. There was often not enough work for the large number of inmates, and this put a considerable strain on UNICOR supervisors. P.I.P. was a constructive solution to the problems of (1) factory overcrowding and (2) unskilled entry-level inmates.

Until recently, pre-industrial programs (regardless of the complexity of the skills being taught) were designed to be 457 hours (90 days) long. They were full-day programs wherever possible. As a result, some of the programs had to inflate the content of the courses in order to satisfy the 90 day requirement. While the P.I.P.'s were successful in keeping the overflow of inmates supervised, they sometimes became ineffective vehicles for training students.

Nevertheless, many of the original guidelines for P.I.P.s have proven to be sound and will continue to be integral parts of factory training in the future. They include: (1) Using actual factory equipment wherever possible, (2) requiring inmates to produce real products with real time-pressures, (3) hiring qualified instructors and (4) working closely with factory managers and vocational training instructors.

In 1986, two dynamic forces caused fundamental changes to P.I.P.s: (1) A cash flow shortage made it necessary to cut back on factory spending. (2) UNICOR was at least partially relieved of the responsibility of "featherbedding" inmates. Because of these changes, a radically new approach to Pre-Industrial training emerged: P.I.P.'s were only to be renewed in FY '89 if they were needed for certification purposes or if the factory could demonstrate long term higher profits and productivity as a result of the training.

As a result, the number of P.I.P.'s halved from FY 88 to FY '89, from 20 to 10. The new, streamlined P.I.P.'s are no longer required to have a "minimum" number of hours - in fact,

shorter and less-formal training programs were encouraged. Because the purpose of the P.I.P. is now solely to train (and not to featherbed), the standard for a successful P.I.P. is clearer: does the training result in higher productivity, less waste and higher morale? These are truer, more market driven criteria; Pre-Industrial programs will undoubtedly improve in quality and efficiency as a result of this shake-up.

### The Post-Release Employment Project

In August 1983, the BOP Office of Research began a nationwide evaluation of all Bureau of Prisons industrial and vocational training programs. Post-Release comparisons between the study group (those who participated in UNICOR work, vocational training or apprenticeship programs) and the control group (those who did not participate) have not yet been summarized. However, some interesting preliminary data has been learned. (See Table 3). We know, for example, that

Table 3

#### Who is Most Likely to Participate in Work and Vocational Training Programs?

- disproportionately female and nonhispanic--females and nonhispanics being overrepresented
- disproportionately non-black--blacks being underrepresented
- offenders with fewer previous convictions
- offenders with more prior commitments
- more likely to have been incarcerated for longer periods of time on current or prior sentences
- less likely to have a recent history of any minor violent episode prior to their current commitment offense
- less likely to have a recent history of any serious violent episode prior to their current commitment offense
- younger at commitment
- more likely to have been a violent commitment offense
- less likely to have been committed for extortion, fraud or bribery
- more likely to have high security score totals indicating that the study group members were originally designated at higher security level institutions
- more likely to release to a CTC rather than to parole

Source: Saylor, B. and Gaes G. "PREP: Post Release Employment Project Interim Report" October 1988.

study group members are more likely to be younger and to have committed more violent crimes. We also know that disproportionately fewer minorities participate in vocational training or UNICOR work experiences.

We can also analyze patterns of changes in occupations held by study group inmates before, during and after they were incarcerated. (See Table 4). From this data we can see that the Bureau of Prisons may rely too heavily on machine-trade training programs, since 25.4 percent of the study group who participated in vocational training programs took machine-trade courses, yet only 10 percent of the group worked in these occupations 6 months after they were released. Similarly service-sector training may be under represented in the Bureau of Prisons. Furthermore 12 times as many inmates are employed in bench-work in UNICOR as those study group inmates who will choose bench work upon release from prison.

We have gained information which will help us improve the selection of vocational training and work experiences for inmates. Yet many questions remain, (See Table 5) and will hopefully be answered shortly, as the post-release employment project concludes.

## Conclusion

Some BOP programs, such as literacy, have developed in progressive and easily discernible increments. Other programs, particularly occupational and Pre-Industrial training programs, are less uniformly defined. Nevertheless, the past few years have provided us with rich experiments and carefully constructed research. The results of this watershed of information will take some time to fully understand, but a clear direction for the future of occupational training in the Bureau of Prisons is emerging.

## References

- U.S. Bureau of Prisons, Policy Statement 5350.17, Adult Basic Education, April 1988.
- U.S. Bureau of Prisons, Draft Operations Memorandum "Submission of Pre-Industrial Proposals," FY '89.
- Saylor, B. and Gass, G. "Prep: Post-Release Employment Project-Interim Report," October 1988.

Table 4

### Occupational Changes in the Study Group

Occupational Classification	U.S. Labor Force, 1983	Pre Incarceration	Vocational Training	Apprenticeship Training	UNICOR	CTC	Six Month Follow-Up	Twelve Month Follow-Up
Professional, Technical	26.4%	13.5%	12.7%	17.5%	2.3%	6.1%	11.9%	11.9%
Clerical, Sales	28.0	16.7	15.0	3.5	19.0	20.5	18.0	19.3
Service	13.7	15.4	5.3	16.7	3.0	13.6	13.8	11.9
Agriculture, Fishing	3.7	4.4	1.6	2.6	0.0	1.9	2.9	3.3
Processing	3.3	2.0	5.5	4.4	1.4	2.0	1.5	1.0
Machine Trade	6.9	9.1	25.4	14.9	12.4	10.5	10.4	10.4
Benchwork	3.6	4.3	4.2	7.8	47.9	3.9	3.3	3.8
Structural Work	7.7	23.5	23.8	29.8	3.9	30.5	26.0	26.0
Miscellaneous	6.7	11.1	6.4	2.6	10.1	9.1	12.2	12.3
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number of Cases	100,822,000	2837	1357	114	2024	2538	2312	1624

Source: Saylor, B. and Gass, G. "PREP: Post Release Employment Project--Interim Report", October 1988.

Table 5

PREP: Further Analyses

1. What is the impact of broad and specific occupational skills acquired in prison on post-release employment?
2. Are there regional or local job market factors such as unemployment, cost of living and "discouraged work force" indicators which preclude program success?
3. Are the factors mentioned in 2 (above) occupation specific, in which case the Bureau of Prisons must readjust its thinking in training and work experience?
4. Does program involvement inhibit recidivism or is there a mutual relationship between gainful employment and recidivism?
5. If inmates are unable to find employment in an occupation for which they have acquired skills, do they become more discouraged than if they had not acquired these skills?
6. What is the nature of post-release employment? Do ex-offenders take low prestige, entry level jobs and work their way up, or do they exhibit job instability trying to find a better job?
7. What is the effect of work and job training programs on the adjustment and management of inmates in the institution and the Community Treatment Center?

Source: Sayler, B. and Gaes, G. "PREP: Post Release Employment Project Interim Report", October 1988.

**Biography**

William R. Muth received an M.A. from George Washington University in 1977 in Special Education. He established a special education school in Barbados, W.I. and taught emotionally handicapped children in Montgomery County, Maryland. He has worked for the Bureau of Prisons since 1980 as a reading teacher, assistant supervisor of education and principal. He is an education specialist in the central office. He is an adjunct professor at Lenoir-Thyne College in Hickory, North Carolina.

**Eastern Kentucky University  
College of Law Enforcement**

**Career Opportunities**

Graduates from the Department of Corrections Services may pursue careers as juvenile or adult probation officers; counselors in institutions, halfway houses or community centers, institutional caseworkers or parole officers, and working with rape victims, spouse abuse, battered children, court administration, pre-trial diversion, and related social service and criminal justice fields.

Fire and Safety Engineering Technology graduates may qualify for careers in industrial fire protection, arson investigation, insurance risk evaluation, industrial safety areas, fire protection equipment industry, state fire training agencies, insurance adjusting, municipal and county fire departments, structural design for fire protection, state safety programs, federal fire departments, and others.

Graduates of the Police Administration program have found jobs as patrolmen, troopers, state policemen, narcotics agents, customs agents, military policemen, immigration inspectors, special agents for the Intelligence Division of IRS, postal inspectors, and FBI agents.

Students majoring in Security and Loss Prevention are prepared for a career in the following fields of loss prevention at the supervisory or management level: Governmental (military, education, health, banking), industrial (private, public), retail (hotel/motel, restaurant, department stores), transportation (railroad, airport/airline, maritime), insurance (investigation, adjusting, inspection), health care facilities (hospital), and financial (banks).

The Traffic Safety Institute students may pursue careers in driver education, law enforcement, accident investigation, commercial driver education, safety agencies, and organizations in both private and public sectors.

# Vocational Assessment and The Role of Vocational Programming in the Prison Setting

John S. Platt  
Richard V. Briscoe

---

## Abstract

*This article is based on the premise that assessment, placement and vocational preparation when effectively utilized lead to improved security and rehabilitation. It explores the aspects of a quality program and advances the theory that such programming will lead to improved security.*

---

The prison setting in many ways is conducive to the basic tenants of vocational education. That is the various jobs required within the institution provide a rich array of opportunity for job training and placement in settings which are in keeping with the abilities of the inmate. Through a comprehensive vocational training program which utilizes assessment, selective placement and preparation programs correctional institutions have the opportunity to 1) fulfill their mission of rehabilitation 2) increase inmate and staff morale and 3) increase inmate productivity.

The concept of self worth or self concept is one which psychologists, educators and psychiatrists have identified as crucial to individual adjustment (Whelan, Melendez de Sarran & Fortmeyer, 1988). Researchers have debated how to improve self concept (Scheirer & Kraut, 1979). Some (Rubin, Doris & Sandidge, 1977) stating that an individual will achieve and thus improve his self concept after he has adjusted. Whelan et al. (1988), in a comprehensive review of this debate, show that the bulk of the existing research shows that self concept and adjustment will improve when the achievement of the individual improves, in short achievement precedes adjustment.

Work has been closely tied to the self esteem of Americans (Schneider & Ferritor, 1982). The usual question encountered by an individual meeting another is not "what are you interested in" rather the question is "what (type of work) do you do?" This question presents a significant challenge to correctional educators and rehabilitationists as far too many inmates if they were to answer honestly would be compelled to say that prior to their incarceration they did not work. Beto (1989) states that prisons are populated by "the poor, the stupid and the inept . . ." pg. 60. Many have either never worked or even know the type of work which they are suited. Additionally, the change to a service economy has created

jobs which require significant literacy skills (U.S. Department of Labor, U.S. Department of Education 1988), thus placing additional skill demands on the inmate. If inmates are to have an opportunity to compete in an economy which is changing and demands a high level of productivity corrections planners must develop a training environment which enables them to obtain skills commensurate with both their aptitude and interest as well as the increasing literacy demands. Such programming should enable inmates to obtain salable skills and a sense of self as a person able to make a living. "Occupation has become the most important determinant of an individual's position in the stratification system" (Schneider & Ferritor, 1982, pg. 33). If we accept this statement that a vocational self is an essential to rehabilitation and a vital ingredient in the positive integration of exoffenders into American society. We must carefully plan so that each inmate has a comprehensive training program designed to assist him in the acquisition of salable skills in keeping with his potential. To ignore this aspect of rehabilitation is to miss the thematic linchpin on which the inmates program should be built.

The need to address vocational development skills within the correctional client population is well established. Berkman, Moutilla, Pearl and Smith (1980) reported that 87 percent of adjudicated delinquents who were not in school at the time of their arrest were unemployed. The California youth authority figures which they also cited revealed that 44 percent of institutionalized non school enrolled youth were unemployed at the time of arrest. The discrepancy between these two figures is likely due to the fact that institutionalized youth are older than the mean age of the total population of youth who are arrested. Coffey (1982) reports that at a time when 7.4 percent unemployment was the national average, adult offenders' rate of unemployment prior to arrest was 40 percent, of the employed inmate population 80 percent made less than poverty level income. Beck (1979) reports the level of income and unemployment is only slightly better in federal correctional institutions.

The relevance of vocational programming for inmates is well supported. The National Advisory Council on Vocational Education (1981) noted fewer arrests and parole violations among parolees who had been involved in vocational training programs while incarcerated. This evidence is viewed by a society that increasingly puts greater value on retribution and punishment than it does on rehabilitative programs. Correctional programming leaders (Farkas, 1985) continue to recommend programming that is characterized by product development to pay inmate room, board and restitution. Vocational skill development is considered too often as only a valuable by-product. Vocational programming must be marketed to the public as cost effective and responsive to specific victims. Program developers must design vocational programs that are sensitive to political realities while maintaining a level of responsiveness to individual inmate needs, designed to address assessed interests and aptitudes while being cost effective and leading to the needed skills for employment.

## Vocational Programming - Placement

Vocational programming must be seen as an opportunity to link institutional personnel together for a common produc-

tive objective. Each staff member can become a part of the process. The first step in the process has already been mentioned; a valid assessment which determines an inmate's vocational abilities and interests. This is the cornerstone of effective placement. The institution must then be assessed to determine the types of jobs which are available to inmates in view of their security classification (Farrier, 1989) and their ability and interest. Each job within the institution is a possible placement for an inmate, when combined with prison industries and vocational education programs the training options to minimum security level inmates can be significant.

The maintenance of a correctional institution requires many highly skilled trades persons. Each of these persons is a potential vocational instructor (Platt, 1986). By utilizing such an approach the institution becomes a rehabilitation facility as well as a security institution. The mission of staff becomes the development of the inmate vocational and employability skills, such an orientation will benefit the inmate while enhancing the employees self worth in his role as rehabilitationist.

Such a program views the correctional institution as a training center. The following assessment procedures discussed in this paper are each valuable in making this goal a reality.

### Assessment

Pruitt (1986) states "the primary purpose of vocational evaluation is to enhance the probability that individuals will be able to enter into and remain within the workforce of our economy" pg. 2. The key element in Pruitt's statement of purpose is work. Work is the central or primary theme in vocational assessment. Vocational evaluators, on the job assessors, vocational educators and job coaches should concentrate on the evaluation of specific job tasks and related adjustment skills. The practicability of such evaluation has significant value for the correctional educator she/he may structure programming so that vocational, academic, and social skill instruction are conducted on tasks which are specific to work tasks. Such an approach increases the motivation of the client as he realizes that what he is learning is related directly to a functional outcome.

In order to maximize the likelihood of a successful job tenure the vocational evaluation process should include the following components: 1) Evaluation of abilities and interests 2) specific job identification to match client interest and ability and 3) an ongoing evaluation progress.

#### 1. Evaluation of abilities and interests

Formal vocational evaluation or testing is valuable in determining specific client abilities which relate to specific jobs. Evaluation systems such as the McCarron-Dial work Evaluation System (1976), and the Singer Vocational Evaluation System (1977) are a sample of evaluation systems which provide such information. The evaluator can combine this information with specific information listed by job title in the Dictionary of Occupational Titles (D.O.T.) (1965a, 1965b, 1977) to help him determine the feasibility of successfully performing the listed job at a competitive level. The evaluator can also determine the likelihood of the client obtaining the

needed level of skill as a result of a training program. Such information provides the basis for job and training placement. It is the first step in the evaluation process, the building block on which informal measures such as situational assessment, job analysis and work samples are built. The formal vocational evaluation can provide the practitioner with an indication of how the individual functions in abilities directly related to jobs. These abilities are categorized to coincide with D.O.T. aptitudes. Thus the practitioner can reference a job within the D.O.T. to determine what skills are needed and refer back to the evaluation to see how the client scores on related aptitudes. Figure 1 provides an example of a summary sheet found in the Apticom. The code is found in Figure 2. An aptitude score of 100 is exactly average. Scores between 80 and 120 are in the average range. The graph was developed so that relative strengths may be quickly conceptualized. Percentile scores are the percentage of people who score below the evaluatee.

Client interests are of equal importance in the formal evaluation procedure. Client interests must be carefully matched with aptitudes in order to determine jobs or vocational training that the client has both the interest and aptitude to perform in a successful manner. The skillful vocational counselor will assist the client to explore jobs or vocational training possibilities which meet these vital requirements. She/he will guide the client through job clusters and locate jobs which require the level of aptitude which the client possesses. It is ironic that so much emphasis has been placed on client interests in making placements, especially for offender populations which have demonstrated their lack of decision making skills by the fact of their incarceration. An example of such an approach would be: An inmate with an expressed interest in X-ray technology (D.O.T. Code 078-361-010). However, the client lacks the required academic aptitude. The counselor notes that the needed abilities to successfully complete training as a Nurses Aide. This job has a D.O.T. Code of 355.674-014. The 674 portion of the code indicates a lower level of academic skill (6) needed to complete the data requirements of this task rather than those of an X-ray technolo-

APTICOM  
Summary Sheet

Figure 1

CODE	SCORE	BAV	AVG	AAV ING	% STAND- ING
G	84	.....	.x.....	.....	21
V	65	...x..	.....	.....	4
N	89	.....	..x....	.....	29
S	103	.....	.....x..	.....	56
P	113	.....	.....x.	.....	74
Q	90	.....	..x....	.....	31
K	96	.....	.....x..	.....	42
F	97	.....	..x....	.....	25
M	105	.....	.....x..	.....	60
E	110	.....	.....x.	.....	69

Figure 2

**LEGENDS  
APTITUDE CODE:**

- G - Intelligence: General Learning Ability** (based upon a weighted combination of subtests 05, 08, and 10) - The ability to "catch on" or understand instructions and underlying principles; the ability to reason and make judgements. General Learning Ability is closely related to doing well in school.
- V - Verbal Aptitude** (based upon subtest 10) - The ability to understand meanings of words and to use them effectively; the ability to comprehend language, to understand relationships between words and to understand meanings of whole sentences and paragraphs.
- N - Numerical Aptitude** (based upon a weighted combination of subtests 06 and 08) - The ability to perform arithmetic operations quickly and accurately.
- S - Spatial Aptitude** (based upon subtest 05) - Ability to think visually of geometric forms and to comprehend the two dimensional representation of three-dimensional objects; the ability to recognize the relationships resulting from the movement of objects in space.
- P - Form Perception** (based upon a weighted combination of subtests 01 and 02) - Ability to perceive pertinent detail in objects or in pictorial or graphic material. Ability to make visual comparisons and discriminations and to see slight differences in shapes and shadings of figures and widths and lengths of lines.
- Q - Clerical Perception** (based upon subtest 03) - Ability to perceive detail in verbal or tabular material. Ability to observe differences in copy, to proofread words and numbers, and to avoid perceptual errors in arithmetic computation.
- K - Motor Coordination** (based upon subtest 11) - The ability to coordinate eyes and hands or fingers rapidly and accurately in making precise movements with speed. Ability to make movement response accurately and swiftly.
- F - Finger Dexterity** (based upon subtest 07) - The ability to move fingers and manipulate small objects with fingers, rapidly and accurately.
- M - Manual Dexterity** (based upon subtest 09) - Ability to move hands easily and skillfully. To work with hands in placing and turning motions.
- E - Eye-Hand-Foot Coordination** (based upon subtest 04) - The ability to move the hand and foot coordinately with each other in accordance with visual stimuli

gist (3). This approach maintains the clients interest in the medical health field while increasing the probability of obtaining the necessary skills to successfully function on the job.

2. Specific informal job skill and site evaluation techniques.

After the evaluator has analyzed the clients formal vocational evaluation and targeted likely training or job sites he must systematically assess job skills needed to effectively

carry out those jobs or vocational programs for which the offender has a high likelihood of success. Informal methods specifically related to specific job settings are available to the vocational educator, vocational evaluator or job placement personnel. Job analysis, and work samples are valuable informal tools which can be used to increase the likelihood of successful placement, intervention and most importantly job tenure.

### Job Analysis

The Handbook for Analyzing Jobs (U.S. Dept. of Labor 1972) states that job analysis involves a systematic study of the worker in terms of:

1. What the worker does . . . (worker function);
2. The methodologies and techniques employed;
3. The machines, tools, equipment and work aids used;
4. The materials, products, subject matter or services which result;
5. The traits required of the worker.

### Work Samples

Work samples are a frequently used method of evaluation. An effective work sample is developed after a job analysis has been completed. This should assure the sample will include the essential components of the job for which you wish to determine a client's suitability. Such work samples are developed by an evaluator or educator and are specific to a job for which client placement is projected. This technique has obvious value to the individual. Work samples can also be a commercial set of job tasks. Such samples have good utility if the evaluator wishes to compare an individual to national norms. This approach is useful if a client has difficulty on psychological tests or difficulty with verbally based tests as the focus is on the specific job tasks (Pruitt, 1986).

Dunn (1976) points out that competitive norms or industrial standards constitute the best standard for judging client suitability for a job. Correctional educators should determine the level of acceptable performance required to successfully compete within the institution on a certain job, this information can then be used to compare with the individual's performance on the sample to make a realistic prediction of success on the job. Rubin and Roessler (1983) point out the advantage and disadvantages of work samples. Some of their points are listed below:

### Advantages

1. Work samples tend to look like work and therefore tend to hold the client's interest.
2. The client gains increased self-understanding as a result of the opportunity to directly test out the validity of preconceived skills and interests.
3. Actual work behavior can be observed by the evaluator.
4. A large number of areas can be evaluated.
5. The data have better construct validity than those provided by psychological tests (Pruitt, 1970)

## Disadvantages

1. It is time consuming (evaluator must observe activity).
2. Technical obsolescence is a problem.
3. Work samples appear to yield better predictions of client performance in training than on post-training jobs (Neff, 1976).
4. There sometimes is limited comparability between environment in industry and the work sample setting.

The prison setting provides ready access to the needed material to develop an on-site work sample. It is recommended that prior to a work assignment, job placement or vocational training placement an inmate be asked to perform a work sample specific to his placement. This should determine his suitability for the specific vocational tasks within the job. A more situation specific assessment is provided by the next procedure.

## Situational Assessment

Once the inmate is on the job the vocational evaluator should perform a situational assessment. As Rubin and Roessler (1983) point out "There sometimes is limited comparison between the environment in industry and the work sample setting" (pg. 136). This point provides a strong rationale for situational assessment. Situational assessments have traditionally been limited to sheltered workshops and to work adjustment skill evaluations. The prison environment provides an excellent opportunity to broaden this technique to include clients of average ability. Specific job tasks as well as work adjustment skills should also be assessed to provide a complete view of the workers performance. The evaluator may use much of what he has learned in the development of a job analysis and a work sample. The following steps are easily followed.

1. Obtain a job analysis of the job the inmate is to perform.
2. Have the client's supervisor check to see if this is an accurate description of the tasks and objectives of this particular job.
3. Ask the supervisor to identify the tasks that the client must complete in the proper sequence.
4. Make a list of these tasks.
5. Ask the supervisor to identify workers who perform these tasks at acceptable levels.
6. Observe the client on the job.
7. Determine which tasks if any he is not performing at an acceptable level.
8. Provide assistance to help the client perform at an acceptable level.

The chief advantage of situational assessment is that it is a structured method for determining how well a client is performing on the job. It is an essential component to the correctional evaluator or educator as such data can be gathered in an institutional work setting and used to assist in appropriate job placement after the inmate is released from the

institution. An example of a situational assessment is provided in Figure 3 (Platt, 1986).

It is obvious from Joe's situational assessment that he has reached mastery on some tasks and needs additional work on others. The observer may prioritize these tasks relative to their level of criticality and determine which tasks are essential prior to Joe's entry into the workforce as a cashier. From inspection of Figure 3 we can see that tasks 1 and 2 (accurate operation of the cash register and making change) are more likely to get Joe into difficulty than problems with bagging groceries or conversing with customers. This indicates to the evaluator that practice on this task is needed in order to assure Joe's job tenure after placement.

## Summary

The goals of vocational programming in correctional institutions are to: 1) provide inmates with employability skills and 2) provide specific vocational preparation which will enable them to obtain employment in the specific job title which they received preparation in or one which requires similar skills. There are various types of assessment techniques and procedures available to the vocational educator and evaluator which can be used to determine an inmate's ability and interest to assist in providing appropriate placement. Once placement has been determined it is essential that assessment continue so that appropriate modifications in instruction and determination of needed vocational skills required to reach an acceptable level on vocational tasks can be more effectively taught. Appropriate assessment can become the key factor to the inmates success in the vocational setting. The educator by utilizing appropriate ongoing assessment techniques can assist the inmate to both enhance his vocational skill, his future job success and his self-worth. Equally important the educator will increase his job satisfaction as he witnesses inmate acquisition of essential work and adjustment skills.



## CORRECTIONAL EDUCATION ASSOCIATION



Join the International Correctional Education Association (CEA). Become a member of the only association dedicated to serving the educators and administrators who provide services to students in the correctional settings.

With a diversified membership representing Europe, U.S., Canada, Australia, and New Zealand, CEA supports research in the field of correctional education; assists in the development and provision of educational services within correctional programs; and supports and assists the professional growth of correctional educators.

CEA's office in the Washington, D.C. area and its Executive Board of 5 nationally elected officers, an International Representative and 8 Regional Directors actively advocate for legislation, for increased funding of new and better programs and provide a forum for exchange of ideas and resources.

Figure 3

SITUATIONAL ASSESSMENT

STUDENT: Joe

Job Title: Cashier

TASKS	LEARNER PROGRESS	INTRODUCED	PARTIAL MASTERY	MASTERY	ASSESSMENT	DATE OBSERVED
Operating the cash register					1.	
			X		2. Is accurate on recording, but needs to increase speed	10/19
					3.	
Making Change			X		1. Has difficulty when customers provide pennies to make change come out in multiples of 5	10/19
				X	2. Constantly places the bill given him above the cash drawer so that he and the customer sees the amount presented for change.	10/23
					3.	
Endurance				X	1. Joe is able to stay on his feet the required amount of time	10/19
					2.	
					3.	
Bagging groceries			X		1. Joe occasionally misjudges the groceries which should be placed in certain parts of the bag.	10/5-10/19
			X		2. Joe occasionally places less durable groceries in the middle of the bag.	10/19
					3.	
Conversing with customers			X		1. Joe's communication (talking) with customer's is characterized by infrequent eye contact and a mechanical sounding greeting.	10/19
			X		2. Joe maintains eye contact at a higher level than on the previous observation.	10/23
					3. Joe's greeting to customers is still frequently mechanical sounding.	

81



## References

- Beto, G. (1989) "Corrections in the Year 2012 (Prospects for Positive Change)," Corrections Today, 51:60-61, 192.
- Berkman, D.J., Moutilla, M.R., Pearl, A., and Smith, C.P. (1980) "A Preliminary National Assessment of Job Opportunities for Adjudicated Delinquents: Complexities and Competition," Sacramento, CA: National Juvenile Justice System Assessment Center.
- Coffey, O.D. (1982) "The American Prison as an Educational Institution: Issues in Correctional Education for the 1980's," (Paper prepared for distribution by the Corrections Program), Washington, D.C.: U.S. Department of Education.
- Dunn, D.J. (1976) "Using Competitive Norms and Industrial Standards with Work Samples," Interface Number 9, University of Wisconsin-Stout, Stout Vocational Rehabilitation and Manpower Services, Menomonie, WI Research and Training Center.
- Farkas, G.N. (1985) "Prison Industries: Working with the Private Sector," Corrections Today, 47, 102-103.
- Farrier, H. (1989) "Secure Prison Industries," Corrections Today, 51, 110-112.
- McCarron, L.T. and Dial, J.G. (1976) McCarron-Dial Work Evaluation System, Dallas: Common Market Press.
- National Advisory Council on Vocational Education (1981) "Vocational Education in Correctional Institutions," Washington, D.C., U.S. Department of Education.
- Neff, W.S. (1976) "Assessing Vocational Potential," in H. Rusalem and D. Malikin (Eds.), Contemporary Vocational Rehabilitation, pg. 103-116, New York, N.Y., New York University Press.
- Platt, J.S. (1986) "Vocational Education in Corrections: A Piece of a Bigger Pie," Remedial and Special Education, 7, 48-55.
- Pruitt, W.A. (1970) "Basic Assumptions Underlying Work Sample Theory," Journal of Rehabilitation, 36, 24-26.
- Pruitt, W.A. (1986) Vocational Evaluation, Menomonie, WI: Walt Pruitt Associates.
- Rubin, R.A., Dorie, J. and Sandidge, S. (1977) "Self-esteem and School Performance," Psychology in the Schools, 14, 503-507.
- Rubin, R.A., Dorie, J. and Sandidge, S. (1977) "Self-esteem and School Performance," Psychology in the Schools, 14, 503-507.
- Rubin, S.E. and Rossler, R.T. (1983) Foundations of the Vocational Rehabilitation Process (2nd Edition) Baltimore, MD, University Park Press.
- Scheirer, M.A. and Kraut, P. E. (1979) "Increasing Educational Achievement via Self-concept Change," Review of Educational Research, 49, 131-149.
- Schneider, M.J. and Ferritor, D.E. (1982) "The Meaning of Work," in B. Bolton (Ed.) Vocational Adjustment of Disabled Persons, Baltimore, MD, University Park Press.
- Singer, T. (1977) Vocational Evaluation System, Rochester, N.Y., Singer Educational Division.
- U.S. Department of Education, U.S. Department of Labor "The Bottom Line: Basic Skills in the Workforce," Washington, D.C., Office of Public Information, Employment and Training Administration.
- U.S. Department of Labor (1965a) Dictionary of Occupational Titles (Vol. 1, 3rd Edition), Washington, D.C., U.S. Government Printing Office.
- U.S. Department of Labor (1965b) Dictionary of Occupational Titles (Vol. 2, 3rd Edition), Washington, D.C., U.S. Government Printing Office.
- U.S. Department of Labor (1977) Dictionary of Occupational Titles (4th Edition), Washington, D.C., U.S. Government Printing Office.
- U.S. Department of Labor (1972) Handbook for Analyzing Jobs, Washington, D.C., U.S. Government Printing Office.
- Whelan, R.J., Mendez de Samar, L. and Fortmeyer, D. (1988) "The Relationship Between Pupil Affect and Achievement" in E. Meyen, G. Vergason, and R.J. Whelan (Eds.) Effective Instructional Strategies for Exceptional Children, Denver, CO, Love.

## Biography

John S. Platt, Ed. D. is Visiting Professor at the Department of Special Education, University of South Florida.

Richard V. Briscoe, Ph.D., serves as Assistant Professor in the Department of Law and Mental Health at the Florida Mental Health Institute, University of South Florida.

## GROW WITH US

CEA is the largest and only affiliate of the American Correctional Association with a headquarters and staff, which stands ready to serve you in a number of ways.

CEA is growing, developing, and gaining international recognition in the field of corrections, in the public eye, and before legislative bodies.

In order to continue this growth, CEA needs your support as a member and your active participation in the Association's many activities.

SO WHY NOT JOIN TODAY, AND BECOME A FORCE IN THE SUCCESSES OF TOMORROW.

# A Review of Federal Support of TIE: Yesterday and Today

Neal Miller

## Abstract

*The paper reports on the findings of the Institute for Economic and Policy Studies (IEPS, staff from their review of the National Institute of Corrections correctional education grants (Senator Specter Initiative) supporting TIE programs. Descriptions of TIE programs in Maryland, New Mexico, Arizona, and Massachusetts are provided. Additional information about TIE projects in states visited by IEPS staff on other projects is also set forth. The combined information is then used as the basis for drawing generalized conclusions about the difficulties states face in implementing TIE. Recommendations are presented based on this analysis.*

## Introduction

The TIE concept (training, industries and education integration) is of very recent origin. For example, a 1979 report to the National Institute of Justice on the state of the art in correctional education did not make any reference to any concept akin to TIE (Bell et al. 1979). As late as FY 1985, there were no federal funds available to support TIE.

But in its FY 1986 program plan, the National Institute of Corrections announced that a small number of grants would be available to support TIE projects. That same year (1985) the first national conference on TIE was held. This year we are attending the second national TIE conference.

The question that arises is what has occurred in the past 3 years? Are we any further developed in defining TIE? What lessons have been learned from its implementation in many states? What can we realistically hope to achieve through TIE?

The Institute for Economic and Policy Studies (IEPS) through its several grant programs has had a unique look at the spread of the TIE concept, which permitted us to gain some insights in answering these questions. First of all, IEPS has served as the documentation team for NIC's education grant programs under the two Senator Specter funding cycles in FY 1985 and FY 1986. As the documenters for NIC, IEPS staff have visited those grantees who have implemented TIE and other education projects in over a dozen states. At the same time, as a prime provider of technical assistance to prison industries programs, IEPS staff have also had an opportunity to look at TIE-like projects that have been implemented by states under the industries program budget. Thirdly, working with the Tennessee Department of Correction, IEPS assisted the department in developing its own systemwide TIE program.

## The TIE Concept: What and Why?

What is TIE? In brief, TIE stands for the integration of training, industries and education: a shorthand way of referring to academic and vocational education working with correctional industries. There is nothing new in the idea that correctional programs should be integrated. As early as 1968, the U.S. Department of Labor (DOL) had determined that academic and vocational training can be successfully integrated, noting that "it will be necessary to clarify the relationship between prison industries, institutional maintenance activities and the vocational training program..." (Aller 1968: 8). Five years later the DOL was funding states to develop models for the integration of all three legs of the TIE concept, then called COMP: Comprehensive Offender Manpower Programs.<sup>1</sup> But with the replacement of federally led initiatives under the Manpower Development and Training Act of 1962 with the decentralized Comprehensive Employment and Training Act of 1972, prison training programs lost emphasis and cohesion across the states. The infant TIE became lost in the transition.

The reasons that led to DOL's initial sponsorship for TIE did not disappear, however, Sidney Fine in an early article on the limitations of correctional education noted that "performing effectively... takes more than the skills learned...". Other skills needed include adaptive skills such as punctuality, impulse control or budgeting, and functional skills such as interpersonal abilities (Fine 1968: 107). Ten years later, the Bell report on correctional education noted how education programs are in competition with industries, institutional maintenance programs, and other treatment programs for inmate participation (Bell et al. 1979: 70-71). At the same time, Luftig was writing on how vocational education programs could be integrated with industries programs to their mutual advantage (Luftig 1979).

If the utility of the integration of the three TIE components has been clear for over two decades, why has so little been done to accomplish their integration? Luftig suggests in his article that one of the primary barriers to industries and vocational education working together is the absence of any clear communication channels between them. But this really begs the question, since this but leads to the next question of why there is so little communication despite the incentives to all parties to begin discussing working together. This leads one to believe that there may be disincentives working against cross-program communication. Put another way, this failure of communication may be because the incentives perceived by outsiders to reward communication are either illusory or outweighed by unrecognized disincentives.

The recent NIC support of the TIE concept presents an opportunity to examine what those disincentives might be and share that information with those states interested in implementing TIE. This agenda fits neatly with the two national conferences on TIE, which have focused the attention of correctional policymakers on the TIE concept, the logic of the ideas behind the concept and demonstrated how this concept can be implemented.

## TIE Implementation Experiences With NIC Support.

The Maryland Plan is the most ambitious in the states

funded under the NIC initiative. This program proposed to (1) provide shop-specific vocational training to inmates prior to industries hiring, (2) provide basic education for inmates without high school degrees who are working in industries, (3) provide in-service training to inmates in industries to upgrade their skills, and (4) provide job readiness training to inmates working in industries who are about to be released from prison. This program plan revolves around the twin truths of industries that it is a preferred inmate assignment in prison and effective preparation for inmate participation in the world or work. The better pay and working conditions given inmates in industries are used as incentives to encourage them to enroll in training and education programs. Industries gains from its inmate workers participation through the increased productivity resulting from better skilled workers and higher worker morale. Inmate willingness to participate in unpaid training prior to paid employment in industries is also useful as a screening device to test inmate commitment to the work ethic. Education and training programs gain from both the increases in their enrollments and the higher motivation displayed by these new participants.

The implementation experiences of the Maryland plan demonstrate the difficulties inherent in any correctional reform effort. The most significant problem was the failure of the correctional education system to modify its course schedule to accommodate the delays resulting from difficulties in identifying inmate workers without high school degrees. This was a laborious process due to the unreliability of both inmate self-reports and correctional agency records (which may also have been based on inmate reports). Local school district records were found to be the only reliable source of information; but even the small number of records required to be checked took a considerable period of time. The result was that by the time school achievement information was ready, the correctional education program was already in progress. Another problem was the difficulty in recruiting a vocational trainer for the pre-service training. Local craftsmen with the requisite experience were leery of working with inmates due to the possibility that they might thereby become afflicted with AIDS; the irrationality of that fear was not easily overcome. Problems were also seen in the sometimes lukewarm support given the project by security personnel in the DOC. This is not a new phenomena, nor necessarily unexpected, so that little more need be said.

New Mexico proposed a less ambitious TIE plan that focused on pre-employment vocational training and related academic training in mathematics. Inmates completing the pre-service training would be given hiring preference by industries. Industries provided the equipment used in the training program, while a non-industries person was hired as its instructor.

Implementation suffered from an inability to hire all the graduates of the training due to production cut backs. There was also some initial resistance to the program from the industries shop foreman, but this was overcome by central office reiteration of its support.

Arizona proposed a similar project that primarily focused upon pre-service training. The centerpiece of this project is its development of a model for comprehensive assessment of needed worker skills. Once identified, skill deficiencies would

then be remedied through appropriate training or education. These skill areas included reading, computation, writing, interpersonal problem solving skills, and knowledge of work ethic. It would also assess: level of intelligence, link between criminal history and employment, prior vocational training received and past job skills.

Other grant elements stressed staff training in the concepts underlying the inmate assessment component. Staff workshops included training in instilling a work ethic and several trainer training programs.

Implementation problems had forestalled successful project operation in Arizona as of early 1988 when an IEPS site visit was conducted. Most of these problems related to lack of top level support for the project, resulting in transfer of the shop to another facility and other difficulties. Noteworthy here were the problems resulting from training inmates in medium security for work in a shop located in a maximum security wing.

The Massachusetts program bears some resemblance to the last two cited projects, but also differs from them. This project provides training to inmates prior to entry into industries work, but this training is directed as much at providing inmates with wide exposure to employment opportunities as it is at preparing them for a particular shop.

Inmates entering the TIE program are given the opportunity to explore six work areas: welding, woodwork, electrical wiring, graphic arts, drafting and sheet metal. Graduates are given preference in industries hiring, or they may choose to enter an apprenticeship program or continue with advanced vocational training. Academic remedial work is also included in the program for those requiring it.

Implementation problems have not been reported to be a major concern. The IEPS site evaluator did suggest that the inmate participants in the project have not been those most in need of vocational experience, as proposed by the grant application. The question of which inmates are most suitable to this type of project remains.

## A Preliminary Synthesis

These NIC-funded TIE projects are in no way the universe of TIE projects. Only a small number of states have received TIE federal funding. Many other states have used their own funds to establish TIE programs of one sort or another. Even those states with federal funds have often established similar programs in other facilities using their own moneys. Maryland, for example, coordinates its vocational training with industries hiring at its MCI-Hagerstown facility, where inmate workers are also expected to continue education and training programs while employed by industries. The existence of a Mutual Agreement Program throughout the system is said to be a factor in the success of the work-study program. At MCI-Jessup, inmates in vocational training classes use industries equipment and are trained in an industries shop during non-work hours.

Another effort at a comprehensive approach to TIE is illustrated by the Tennessee DOC. In Tennessee, inmates are not given work assignments except for the lowest level, unless they can demonstrate a high school equivalency. Job promotion requires educational achievement by inmates;

higher skilled jobs require vocational education completion.

Ohio has also undertaken an ambitious plan for implementing TIE. This includes identifying inmates who need improved reading, a minimum of 3 months of reading courses, structured employment opportunities for inmates that begin with maintenance work through industries, and linkage between vocational training and industries.

Last year while still at IEPS, Robert Grieser reported on six other states with TIE projects and two states with integrated management of industries and vocational training (Grieser 1987). The IEPS update of the Guidelines for Prison Industries for NIC will have more information on state TIE variations.

The NIC-funded projects do illustrate the diversity of approaches to TIE that one sees around the country. More importantly, the implementation experiences reported by these projects are indicative of both the scope of problems other projects may expect to face and the types of solutions needed to resolve these problems. Among the lessons learned are the following.

- TIE is a central management initiative that will be implemented both across the correctional system and at individual facilities. The absence of central office leadership often results in delay in TIE implementation and project diminution or even project termination before completion. Top level commitment to TIE is therefore needed to ensure that the inertia of past security and classification practices do not undercut TIE implementation.
- Correctional industries' support for TIE is also critical, since industries is that entity within corrections that has the most discretionary access to funds. However, industries criterion for committing to TIE is a showing of the benefits it will gain, such as more experienced workers, increased worker productivity and, ultimately, increased profits.
- In contrast to industries, the benefits from TIE to education and vocational training are more bureaucratic than economic in that increased enrollment, higher student motivation and learning are the desired outcomes. Hence the economic costs of TIE are not as easily offset—unless provision is made for documenting these program achievements.
- Complete and correct offender information is a prerequisite for comprehensive TIE implementation. This information may be obtained manually, but it is expensive to obtain and maintain in this way.
- Small-scale implementation of TIE provides useful testing of the concept, but provides only limited benefits. This is because of the greater likelihood of implementation problems arising from the absence of clear-cut central office backing that small-scale projects seem to have. Further, piece-meal implementation of TIE seems to increase the likelihood of goal conflicts between project partners. This can result in TIE serving inmates in less need of its services; the opportunity for inmate skill improvement is thereby diminished.
- Additional resources are needed in the short run to implement TIE. Long term, TIE pays for itself through increased industries productivity. The gains in in-

creased correctional "productivity," such as reduced recidivism, are, of course, an additional economic benefit in the long run.

The principal lesson to be drawn from these observations is that the more comprehensive the proposed TIE program is, the more likely it is to succeed. This is because broad scale programs are more likely to garner the top leadership support and direction needed for program success than are small-scale programs. This results from the fact that small-scale efforts are not thought to merit significant policy direction; their small size is assumed to match the level of problems they will face or the difficulties of solutions. Broad-scale TIE efforts, however, are more likely to have DOC leadership involvement, as for example, programs that require the establishment of new work schedules to offer education programs for inmates working in industries.<sup>2</sup>

### A Final Word

The TIE concept of integrated programming among training, industries and education has been fully implemented in only a few correctional facilities. Systemwide implementation has not yet occurred in any state. Nonetheless, the basis for such implementation has been set. Plans for wide scale TIE implementation exist in several states. The need today is the courage to make the totality of changes required for such implementation to occur. This will, of course, be upsetting to some. This has always been the case in a field where the simple answer to claims that "nothing works" is that "nothing has been really tried." TIE makes good sense; shouldn't we try it?

### References

- Aller, C. (1968). "Lessons Learned from Vocational Training Programs Given in a Prison Setting." In, *Education and Training in Correctional Institutions: Proceedings of a Conference*. Madison, WI: University of Wisconsin, Center for Studies in Vocational and Technical Education.
- American Correctional Association. *Standards for Adult Correctional Institutions*, 2nd edition. College Park, MD: The Association, 1981.
- Bell, R., Conard, E., Laffey, T. and Lutz, J. G. (1979). *Correctional Education Programs for Inmates*. Washington, DC: U.S. Department of Justice, LEAA.
- Fine, S. (1968). "Discussion." In, *Education and Training in Correctional Institutions: Proceedings of a Conference*. Madison, WI: University of Wisconsin, Center for Studies in Vocational and Technical Education.
- Grieser, R.C. (1987). "The Integration of Training, Industries and Education: History and Application." Paper presented to the Correctional Education Association Conference, San Francisco, CA.
- Luftig, J.T. (1979). "Training Prisoners for Industry Jobs: The Role of Vocational Education." In, *A Guide to Effective Prison Industries*. Vol. I. Philadelphia, PA: American Institute of Criminal Justice.

## Footnotes

1. See, e.g., *The Illinois COMP Program* (no date). Illinois Law Enforcement Commission, Correctional Manpower Services Unit. The scope of this effort may be briefly illustrated by reference to several project reports. These include: Coldren & Meyers, *Interim Report: Stateville Private Industry Project* (1974) describing the use of computerized MIS to support linkage of vocational training with prison industries; *Family Reintegration Project* detailing project to train families of young ex-offenders in interpersonal skills needed to create a supportive environment; *Control Data Institute Self Placement Program* for training inmates to gain jobs upon release; Malcolm Sharp, *Evaluation of Pre-Vocational Orientation and Guidance Project* designed to provide a quick exposure for youth to six vocational areas.
2. See Model Sentencing and Correction Act Section 4-807(d) requiring the director of the DOC to schedule education and training programs so as "not to restrict a program participant's opportunity for employment." See also *ACA Standards for Adult Correctional Institutions*, Standard 4426 (2d ed.).

## Biography

Neal Miller (an attorney) has 17 years of policy-research experience in corrections programming, specializing in post release employment. During the past decade with the Institute for Economic Policy studies, he has become one of the leading experts on correctional industries and has published over a dozen books, articles and reports.

## What is T.I.E.?

The T.I.E. (Training, Industries, Education) concept is based upon the principles of cooperation, integration and coordination. The T.I.E. approach provides opportunities for incarcerated offenders to work and to improve their academic, social, and vocational skills. Cooperative ventures which integrate educational programming with work and industry assignments require coordinated efforts with additional components of the correctional operation including classification, security, mental health and housing.

The goal of T.I.E. programming is to increase the skills and productivity of the inmate work force and to enhance the offenders employability. The provision of comprehensive education and work programs should help to facilitate the offender's transition to the community.

This definition was originally developed for the National Academy of Corrections, Prison Industry, Education and Work Seminar (July, 1988).

# CORRECTIONAL INDUSTRIES ASSOCIATION

## Mission Statement

To provide an association and a program representative of those individuals and agencies, both public and private, who are engaged in and concerned with correctional industries as a meaningful employment program for inmates in correctional institutions.

To aid in the employment, training, education, and habilitation of inmates in correctional institutions.

To promote a closer understanding and relationship between correctional industries and the general public, private industry, organized labor and other interested parties.

To encourage the development of innovative programs, research, design, and program evaluation for the improvement of correctional industries.

## Organizational Structure

### Local

Various jurisdictions, including states, counties, cities, federal agencies and the dominion of Canada, engaged in various correctional industries activities, and other public and private organizations and individuals with an interest in correctional industries, generate the active individual and agency memberships.

### Regional

Local jurisdictions are assigned to one of six continuous regional districts to promote ongoing interaction and the promulgation of the ideals of the organization within the region.

### National

The national organization is a not-for-profit, tax exempt association whose property and affairs are managed by a body of officers and a board of directors duly elected by the association membership at large. Meetings of the association and the Board of Directors are open to all members of the association.

# Illiteracy and the Workplace: Implications for the Education and Training of Offenders

Osa D. Coffey

## Abstract

*This article presents some facts both about illiteracy and its impact on persons and the national economy. It also discusses some current models in literacy training, drawing on the one "No read—no release" program for inmates in Virginia. The newest concept in literacy training, "workplace literacy" will also be presented. Suggestions are made on how to incorporate the concepts of literacy, "functional literacy" and "workplace literacy" in correctional education and training programs to help a larger number of inmates leave institutions better prepared for the world of work—now, for the 1990s, and into the next century.*

## Magnitude of the Literacy Problem in America

We can no longer deny that illiteracy is a major problem in America. It is not a new problem; rather it came out of the closet in the early 80s—brought to our attention through studies like "A Nation At Risk" and books such as Jonathan Kozol's *Illiterate America*. Illiteracy was brought to the attention of every household in America through the media. Yet relatively little is being done to cure this blight on the American scene. Denial is not going to make the problem go away, so we may as well face the awful facts.

The current most educated estimate is that some 27 million Americans cannot read at all. Another 35 million can read at a level that is less than what is needed for survival in our society—they are called "functionally illiterate." Together these two groups constitute almost a third of the American population. They are "Illiterate America," Jonathan Kozol's term which the author will use in this article.

It is estimated that by the year 2000, unless we tackle this problem seriously, functional illiterates will compose 70 percent of America's general population. Some of illiterate America are in the workforce, where they constitute 30 percent of America's unskilled workers, 29 percent of the semi-skilled workers and 11 percent of the professional working class (including managers and supervisors). They are functionally illiterate despite, in many cases, having high school diplomas or college degrees.

Working illiterate America has caused corporate America enough headaches and costs to generate "workplace literacy programs" in many giant companies.

More commonly, illiterate America is found among the unemployed, the poor and the criminal. Here are some facts:

- one-third of mothers who receive welfare are illiterate.
- 85 percent of juveniles who come before courts are illiterate.
- Half the heads of households classified before poverty lines are illiterate.
- 60 percent of the adult prison population are illiterate—the single highest concentration of adult illiterates.
- One-half to two-thirds of the unemployed lack literacy skills to be retrained for high-tech jobs.

To everlasting shame, the United States now ranks 49th among 158 member nations of the United Nations in its literacy levels.

## Human Cost of illiteracy

Illiteracy takes both a human toll and an economic toll. Illiterate Americans cannot read the front page of a newspaper, the poison warnings or antidote directions on a household product, the dosage on a medicine bottle, a menu, a train or bus schedule, the manuals for equipment, or street signs. They cannot complete basic forms, such as job applications, welfare and Social Security applications, or ballots; they cannot fill out U.S. Census forms, which keep track of their numbers, so many remain uncouneted.

Illiterate adults cannot read to their children or help them with homework. They often pass illiteracy down to subsequent generations; it is like an inherited disease. But it is a curable disease.

Illiterates are denied the full participation in our society and in democracy. They are, as Kozol suggests, "internal exiles," hiding their disability, hemmed in by it, and denied the opportunity to exercise their full rights as citizens.

## Economic Costs of Literacy

It has been estimated that adult illiteracy is currently costing our nation about \$225 billion annually in lost industrial productivity, unrealized tax revenues, welfare, crime, prisons, and related social ills (Goddard 1987). The recent increase in attention to workplace literacy programs is not accidental; corporate America is suffering the consequences of widespread illiteracy, such as: workers' compensation costs due to accidents caused by inability to read safety warnings; damage to machinery due to inability to read instructions for operation and repair; inability to find workers for new high-tech tasks; and inability to retrain workers for change.

By 1995, manufacturing will provide about 21 million jobs, a drastic decrease from the current level. By 1995, the automotive industry will have 40,000 fewer workers. The U.S. Department of Labor predicts that an increase in the overall level of literacy will be required by 1995 and that occupations that demand few or no reading skills will disappear. Business services, computer and data processing jobs, health-care and professional services will account for the fastest growing areas of the economy, as well as service-oriented jobs in general. Unless something drastic is being done to upgrade literacy skills in this country, America will not be able to produce sufficient numbers of workers with sufficient skills to

meet industry demands in the 1990s and beyond.

What is government doing about it? Pitifully little. The federal government spends some \$300 million each year to reach 60 million functionally illiterate persons—that is 20 cents per person per year. State governments spend about the same amount per person each year. Together, federal, state, local and private literacy programs in America today reach only about 4 percent of the illiterate population. Only a multi-billion dollar program would make much of a dent in the current problem. What is needed is obviously a grassroots effort; illiteracy is a problem that affects us all and we all need to be part of the solution.

## Two Models of Literacy Programming

Two "models" of literacy programming of particular relevance to the combined work in education, industry and training will be presented. Literacy programming has gone through several phases in the last couple of decades. Originally literacy meant the ability to read, usually measured in public school terms in grade equivalence. Even today, we have a difficult time getting away from this terminology, although it is increasingly less meaningful. In the early 1970s the concept of "functional literacy" was introduced as a result of the Adult Performance Level Project in Texas. This project defined literacy as not only including basic, enabling skills, but also the context in which adults had to use these skills.

The most widely accepted definition of "functional literacy" today comes from a seminal work, Hunter and Harman's *Adult Illiteracy in the United States*, (1979). It defines functional literacy as: "The possession of skills perceived as necessary by particular persons and groups to fulfill their own self-determined objectives as family and community members, citizens, consumers, job-holders, and members of social, religious or other associations of their choosing. This includes the ability to read and write adequately to satisfy the requirements set for themselves as being important for their own lives; the ability to deal positively with demands made on them by society; and the ability to solve the problems they face in their daily lives."

Adult literacy programs in the last decade frequently have emphasized what the adult wanted and needed to learn to read, building in life skills, basic math skills, and anything else the student needed for coping in his or her actual every day life, while also providing the learner with the basic skills that would enable the learner eventually to continue into more advanced reading materials. Literacy programs were seen as enabling and empowering individuals, providing them with a ticket to the mainstream of America. It emerged in the wake of the Great Society.

## What is Workplace Literacy?

"Workplace literacy" is a specific application of "functional literacy." It is literacy taught for a specific work-related purpose, in a specific place, and at a specific time. It is corporate America's last stand against illiteracy that reduces productivity, hampers retraining and causes costly damages. It is not charity, but necessity. The focus is not the individual but the job, the profit. And as such it has to be efficient.

Workplace literacy covers a range of skills and abilities, from the basic one of being able to decode printed letters of the alphabet to being able, at least in some instances, to understand statistical reports. Each workplace and job may require its own definition of literacy, changing as the various jobs within the workplace change. Often a company may discover basic knowledge deficiency when technological innovation requires retraining of employees. The new technology cannot be implemented, the management learns, until after a more basic curriculum in reading, writing and/or computation is provided. Out of such necessity, then workplace literacy programs were born in the early 1980s.

Since schools and colleges have failed to produce, in many cases, the type of employee pool that business and industry need to be competitive in the world market, corporate America is now spending more on educational and training programs than our colleges and universities (Goddard 1987). Approximately 35 percent of 800 companies surveyed by the Reading Association indicated that they had to provide basic skills training to employees (Cornell 1988).

The scope of the problem of illiteracy in the labor market can perhaps best be gauged by looking at the scope of corporate literacy programs that have grown up in this decade:

- JAW-GM have spent \$200 million in jointly sponsored programs in basic skills.
- AT&T and its unions have formed an "alliance" and have set aside \$60 million for training in basic skills of AT&T employees.
- Ford offers reading courses in 25 plants.
- IBM spends \$700 million annually on adult education for its employees.

## The Typical Workplace Model

Let us look very briefly at the typical workplace literacy program model since it seems to have some carry-over to the situation in corrections. The purpose is to improve the employees' basic skills in the job context and thereby improve job performance. Frequently these programs distinguish between "reading to do," i.e. skills required to perform a specific task, and "reading to learn," with focus on higher levels of reading as well as cognitive processes that will enable the worker to apply these skills to be able to acquire new knowledge in the future.

It is the "reading to do" that is most commonly associated with workplace literature. To enable the organization to meet its goals in a cost-effective and time-efficient way, little time is wasted on generalities. Usually a job-task analysis is conducted that identifies the kinds of reading tasks the employees must perform on the job. Then the curriculum is designed to reflect these requirements, and job-related materials are selected to be used in the instruction. These may include manuals, charts, diagrams, etc. Usually the curriculum is competency-based, or framed as a series that must be mastered. Usually a pretest on the content is administered to the employees to determine which job tasks/reading competencies should take priority in instruction and how well employees can already perform the literacy tasks associated with performing their jobs. At the end of the instruction, a post-test is

given to test to what degree the targeted skills were acquired. The program participants' job performance level is often assessed within three months after the training to determine whether any further action is needed.

These programs usually employ small classes with some one-on-one instruction. They meet right after work, for about 90 minutes, twice a week. Multiple methods are used, from reading aloud to using computers. Corrections has something to learn from these workplace literacy programs. Research shows that little transfer of learning occurs from use of non-specific, or academic, reading materials to job performance, partially because academic reading tasks differ in nature from job-reading tasks (Mikulecky and Ehlinger 1986). Retention studies show that participants retain 80 percent of the end-of-course increase in job literacy training, but only 40 percent in general reading (Sticht and Hooke 1982). Job-specific instructional materials are also motivating for adults because they have foreseeable application in the participants' actual world of work. Therefore, the training has meaningful context.

This is an area where closer ties between education and training could and should take place in corrections. Academic, vocational and industry staff could get together and identify the job and training related reading skills required, and academic staff can carry this into the classroom to develop curricula, set competencies and develop strategies to teach such skills, along with life skills and basic enabling skills.

### Virginia's Literacy Incentive Plan

Nothing less than an all-out campaign against illiteracy in our society is required to prepare the 60 million functionally illiterate in our society for productive life in the 1990s and into the next century. Likewise, nothing but an all-out effort is needed to deal with the most concentrated adult illiteracy problem in the country—that of our adult inmates, 60 percent or more of whom are illiterate.

The remainder the article will be devoted to the very special initiative in Virginia which holds great promise and could serve as a model to other states. In February 1986, Governor Baliles ordered a Literacy Incentive Program (LIP) to be initiated and tied to parole eligibility. It was quickly dubbed in the press as "no read—no release," which is something of a misnomer. The governor's directive ordered the Department of Correctional Education, Department of Corrections and the Parole Board to adopt necessary policies and procedures and to cooperate with one another. The heads of these three agencies, the state literacy director, and the deputy secretary for public safety have guided the program since its start through a steering committee that meets bi-monthly.

Basically, the division of labor among the three agencies is as follows: the Department of Correctional Education provided the testing and instruction; the DOC provides space and a number of incentives (i.e. pay, highest amount of good conduct credit—30 days off for every 30 served); the Parole Board considers the inmates' educational record as part of its deliberations. Inmates reading below the 6th grade level who refused to participate, dropped out, or were dismissed due to disciplinary reasons will have this weigh against them in the parole decision.

All inmates reading below the 6th grade level are required to enroll in education until they reach 6th grade competency, when they may choose whether to continue. Inmates who refuse to participate have to sign a statement to that effect, which is forwarded to the Parole Board at the time of their hearing.

Unlike most other mandatory correctional literacy programs, the Virginia model requires a proficiency level, not a time-period of involvement.

Students who enroll receive 90 minutes of instruction each day, five days a week. Several approaches are used workbooks, computers, community volunteers, inmate tutors. They had strong connections with LVA during the early stages of the program, and many of the teachers and tutors are trained in the LVA method. For students below the fourth grade—60 percent of the LIP population—inmate tutors are assigned on a one-to-one basis.

More life and social skills are being introduced into the curriculum and specific LIP curriculum guidelines incorporating a set of life skills to be mastered are being developed.

### Progress and Success to Date

After two years, the program has started showing success. Almost 500 students have completed it; of these 61 percent continued voluntarily in education programs. They were highly unlikely to have been in education to begin with, but for the governor's LIP. It was found that the typical student under fourth grade progresses at a rate of 1.4 grades for every year in the program. Those between the fourth and sixth grade level progress much more rapidly—at 3.3 grades per year.

To get an inmate from total illiteracy to the sixth grade level would take an average of four years, at a cost to the state of \$3,000. In Virginia this cost would be paid in taxes in about four years based on an income of \$15,000. The cost per student per year in the LIP program was \$732 a year. Although no prisoner has been denied parole solely for refusing to enroll in LIP, letters to parolees mention the role of program participation or non-participation in relation to the parole decision. A letter of denial of parole may read "get into LIP before returning before the parole board." That sends a clear message, especially to inmates who are to be up for parole soon.

The program has received a great deal of attention nationwide. It will receive an award from the Governor's Association.

The current program operates by the governor's directive. Early next year legislation will be introduced in the Virginia General Assembly to codify the program and to raise the minimum level of acceptable ability from the sixth grade level to the eighth grade. We estimate that this change will increase enrollment by at least 20 percent.



## References

- Chapados, James T., Deborah Rentfrow, and Louis I. Hochheiser. "Four Principles of Training." Training and Development Journal (Dec. 1987), 63-65.
- Cornell, Thomas. "Characteristics of Effective Occupational Literacy Programs." Journal of Reading (April 1988), 654-657.
- Goddard, Robert W. "Crisis in Workplace Literacy." Personnel Journal (Dec. 1987), 73-81.
- Kello, John. "Develop Training Step-by-Step." Training and Development Journal (Jan. 1986), 50-52.
- McGowan, William. "Corporations Aim to Wipe Out Illiteracy." Business and Society Review (Winter 1983), 37-40.
- McGraw, Harold W., Jr. "Adult Functional Illiteracy: What to Do About It." Personnel (Oct. 1987), 38-42.
- Mikulecky, Larry J., and Jeanne Ehlinger. "The Influence of Metacognitive Aspects of Literacy on Job Performance of Electronics Technicians." Journal of Reading Behavior (Fall 1986), 41-62.
- Philippi, Jorie W. "Matching Literacy to Training: Some Applications from Military Programs." Journal of Reading (April 1988), 659-666.
- Ross, Irwin. "Corporations Take Aim at Illiteracy." Fortune (Sept. 29, 1986), 48-54.
- Slater, Courtenay, and Christopher Crane. "Matching People with Jobs." American Demographics (Sept. 1986), 64-67.
- Sticht, Thomas G., and Lydia R. Hooke. Instructional Systems Designed for the Army. On-Duty Education Program Task 3: Handbook for Education Service Officers on the Army Developmental Education Program for Performance and Training. Alexandria, VA: Human Resources and Research Organization, 1982.
- Tartelli, Ross. "What to Look for When You Buy Training." Training and Development Journal (Jan. 1987), 28-30.
- Torrence, David R., and Jo Ann Torrence. "Training in the Face of Illiteracy." Training and Development Journal (Aug. 1987), 44-48.

## Biography

**Osa D. Coffey, Ph.D.** has been involved in the field of correctional education for nearly 15 years. In May 1988 Governor Gerald Baines appointed Dr. Coffey to the position of Superintendent of the Virginia Department of Correctional Education. As Superintendent, she provides the administrative and programmatic leadership of the state agency providing educational programs to adults and juveniles committed to institutions operated by the Department of Corrections. Dr. Coffey previously served as Director of Research and Planning for the Institute for Economic and Policy Studies, Inc. There she planned, developed, directed, and conducted research on criminal justice issues with emphasis on correctional programming, policy analysis, correctional standards, and program evaluation. She has provided technical assistance and training to state and federal agencies as well as private and public organizations throughout the nation and served as a court appointed evaluator and monitor.

Dr. Coffey also served as the first Executive Director of the Correctional Education Association. She developed the legal, financial, and policy basis of this national professional association. Prior to her position at CEA, under a grant from the National Institute of Corrections, she developed the Corrections Program at the U.S. Department of Education. While there she developed agency policy on correctional education, a masterplan for implementing that policy, and an interdepartmental committee on correctional education. Dr. Coffey also served on the staff of the American Correctional Association as director of five separate projects. She was a college professor for 10 years and a public school teacher for 5 years.

Dr. Coffey was instrumental in establishing the Association of State and Federal Directors of Correctional Education and has fostered professional and public concern for education and training of the incarcerated through speeches, workshops, conferences, public forums, and publications.

---

# CIA

Correctional Industries Association

# CEA

Correctional Education Association

# EKU

Eastern Kentucky University

# CORRECTIONAL EDUCATION ASSOCIATION

## CEA: AN INTRODUCTION

JOIN THE INTERNATIONAL CORRECTIONAL EDUCATION ASSOCIATION (CEA). Become a member of the only association dedicated to serving the educators and administrators who provide services to students in the correctional settings.

With a diversified membership representing Europe, U.S., Canada, Australia, and New Zealand, CEA supports research in the field of correctional education; assists in the development and provision of educational services within correctional programs; and supports and assists the professional growth of correctional educators.

CEA's office in the Washington, D.C. area and its Executive Board of 5 nationally elected officers, an International Representative and 8 Regional Directors actively advocate for legislation, for increased funding of new and better programs and provide a forum for exchange of ideas and resources.

---

## MAKE CEA YOUR PARTNER

CEA membership benefits you:

- by increasing your effectiveness, expertise, and skills;
- by involving you in an active and supportive network of professionals who are leaders in their field.

CEA membership benefits your institution:

- by helping to increase the quality of educational programs and services;
- by offering timely and practical information to fellow staff members;
- by representing the collective interest of correctional education before the government, the press, and the public on all levels of government.

---

## GROW WITH US

CEA is the largest and only affiliate of the American Correctional Association with a headquarters and staff, which stands ready to serve you in a number of ways.

CEA is growing, developing, and gaining international recognition in the field of corrections, in the public eye, and before legislative bodies.

In order to continue this growth, CEA needs your support as a member and your active participation in the Association's many activities.

**SO WHY NOT JOIN TODAY, AND BECOME A FORCE IN THE SUCCESSES OF TOMORROW.**

## MEMBERS ENJOY:

The CEA Newsletter, published quarterly, reflecting the latest news in the field of correctional education and within the Association.

The Journal of Correctional Education, published quarterly, offering insight, facts, and figures by top individuals in the field of many areas of topical interest, current events and research.

The International CEA Annual Conference held in a different locale each year, and providing professional workshops, presentation of papers by experts in the field, exhibits by suppliers to correctional education, and an opportunity to gain continuing education credits as well as develop a network of colleagues, friends and potential resources.

Annual Teacher of the Year Award, given to each year's outstanding teacher in an institution as chosen by CEA's Teacher of the Year Committee.

Regional Affiliation, provided to all state chapters and members, enabling them to participate in regional conferences, and receive regional newsletters and other relevant information and correspondence.

Special Interest Groups, enabling members to participate actively in any one or more of CEA's special interest groups. (See listing on application.)

Special Services and Discounts free of charge to all members, on insurance, credit cards and rental cars 365 days a year, with special discounts applicable during the CEA Annual Conference.

Various Publications, available for sale from the National Office at substantial discounts to members.

---

## MEMBERSHIP OPTIONS

**Individual Membership** \$35

You get the Journal, the Newsletter, other publications, reduced conference rates, regional affiliation, special discounts, and voting privileges. This membership must be in the name of one individual.

**Institutional Membership:** \$75

Your institution receives the Journal, the Newsletter, other publications, and regional affiliation.

**Student Membership:** \$15

You receive the same services as individual members. You must demonstrate proof that you are a full-time student.

**Library Subscription:** \$50

Your library receives the Journal, the CEA and Regional Newsletters.

**Corporate Members:** \$250

Entities members to a 20 percent discount on ads, labels, exhibits, Annual listing in CEA publications.

**Special Membership Categories:**

These tax deductible contributions will be recognized in CEA publications. Contributors will receive a one year individual membership.

CEA Benefactor \$100  
CEA Sustaining Member \$200  
CEA Patron \$300

**CORRECTIONAL EDUCATION ASSOCIATION  
MEMBERSHIP APPLICATION**

Name \_\_\_\_\_

**REGION I**

Position \_\_\_\_\_

Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Ontario, Quebec, Maritime Provinces

Institution \_\_\_\_\_

Mailing Address (Check) Home  Office

**REGION II**

District of Columbia, Maryland, Virginia, West Virginia

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**REGION III**

Illinois, Indiana, Kentucky, Michigan, Missouri, Ohio, Tennessee, Wisconsin

Phone ( ) \_\_\_\_\_

**REGION IV**

Colorado, Iowa, Kansas, Minnesota, Nebraska, N. Dakota, S. Dakota, Wyoming, Saskatchewan, Manitoba

**TYPE OF MEMBERSHIP**

- Individual: \$35/year \_\_\_\_\_
- Institutional: \$75/year \_\_\_\_\_
- Student: \$15/year \_\_\_\_\_
- Library: \$50/year \_\_\_\_\_
- Benefactor: \$100/year \_\_\_\_\_
- Sustaining Member: \$200/year \_\_\_\_\_
- Patron: \$300/year \_\_\_\_\_
- Corporate: \$250/year \_\_\_\_\_
- Additional Tax Deductible Donation \_\_\_\_\_

**REGION V**

Arkansas, Louisiana, New Mexico, Oklahoma, Texas

**I WOULD LIKE TO BE A MEMBER OF CEA'S SPECIAL INTEREST GROUPS:**

(Check one or two)

- Research, Education, Training \_\_\_\_\_
- Post Secondary \_\_\_\_\_
- Special Education \_\_\_\_\_
- Legislative \_\_\_\_\_
- Jails \_\_\_\_\_

**REGION VI**

Alaska, Idaho, Montana, Oregon, Utah, Washington, Alberta, British Columbia, Northwest Territory

**REFERRED BY:**

Name \_\_\_\_\_ First \_\_\_\_\_ Last \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

**REGION VII**

Arizona, California, Hawaii, Mexico, Nevada

PAY YOUR DUES BY VISA OR MASTERCARD (circle which one)

Card # \_\_\_\_\_

Expiration Date \_\_\_\_\_

**REGION VIII**

Alabama, Florida, Georgia, Mississippi, N. Carolina, S. Carolina, Puerto Rico

**OR SEND CHECK OR MONEY ORDER TO**  
 Correctional Education Association  
 4321 Hartwick Road, Suite 116  
 College Park, MD 20740  
 (301) 277-9088



# CORRECTIONAL INDUSTRIES ASSOCIATION

## MISSION STATEMENT

To provide an association and a program representative of those individuals and agencies, both public and private, who are engaged in and concerned with correctional industries as a meaningful employment program for inmates in correctional institutions.

To aid in the employment, training, education, and habilitation of inmates in correctional institutions.

To promote a closer understanding and relationship between correctional industries and the general public, private industry, organized labor and other interested parties.

To encourage the development of innovative programs, research, design, and program evaluation for the improvement of correctional industries.

---

## ORGANIZATIONAL STRUCTURE

### **Local**

Various jurisdictions, including states, counties, cities, federal agencies and the dominion of Canada, engaged in various correctional industries activities, and other public and private organizations and individuals with an interest in correctional industries, generate the active individual and agency memberships.

### **Regional**

Local jurisdictions are assigned to one of six continuous regional districts to promote ongoing interaction and the promulgation of the ideals of the organization within the region.

### **National**

The national organization is a not-for-profit, tax exempt association whose property and affairs are managed by a body of officers and a board of directors duly elected by the association membership at large. Meetings of the association and the Board of Directors are open to all members of the association.

---

## WHAT DOES THE CIA DO?

**PROMOTES** the establishment, development, and improvement of correctional industries programs, with the cooperation and assistance of various public and private agencies.

**PROVIDES** for the professional development of its members through effective training programs provided by the association and other supportive sources, public and private.

**ENCOURAGES** innovation in industries programs by seeking grants and other financial assistance for strategic planning purposes and to support activities that can have positive, global implications.

**SERVES** as a clearing house for the exchange of ideas and technology amongst its members and interested parties.

**AIDS** in furthering the constructive employment, training, and education of the thousands of incarcerated offenders who, as a result, may be better prepared for their inevitable and eventual return to the open society.

# MEMBERSHIP DUES STRUCTURE

1. **Classification Dues**
  - a. Active Member \$25.00
  - b. Participating Member 8.00
  - c. Agency Member:
    - 1) Type 1-1-24 Members 100.00
    - 2) Type 2-25-99 Members 200.00
    - 3) Type 3-100-250 Members 300.00
    - 4) Type 4-Over 250 Members 400.00
  - d. Sponsor Member 75.00
  - e. Retired Member 5.00
  - f. Life Member to be selected by the Officers & Board of Directors -None-

2. **Membership Class Benefits**
  - a. Active
    - Voting Privilege
    - One Annual Subscription for Newsletter
    - One Copy of CIA Directory
    - One Copy of Meeting Proceedings
  - b. Participating Member
    - Voting Privilege
    - One Annual Subscription for Newsletter
  - c. Agency Member
    - Membership for One Agency Employee (Voting Privilege)
    - Type 1-5 copies of Directory and up to 24 Newsletters
    - Type 2-10 copies of Directory and up to 99 Newsletters
    - Type 3-15 copies of Directory and up to 250 Newsletters
    - Type 4-25 copies of Directory and up to 400 Newsletters
  - d. Sponsor Member
    - One Annual Subscription for Newsletter
    - One Copy of CIA Directory
  - e. Retired Member
    - Voting Privilege
    - One Annual Subscription for Newsletter
  - f. Life Member
    - Voting Privilege
    - One Copy of CIA Directory
    - One Annual Subscription for Newsletter

3. **Membership Period**  
CIA Memberships shall be for the calendar year beginning in January and ending in December.

4. **Lapsing Memberships**
  - a. All CIA Memberships shall end December 31st of the Calendar Year.
  - b. Membership Privileges shall terminate after 3 months lapse in membership.

## CORRECTIONAL INDUSTRIES ASSOCIATION MEMBERSHIP APPLICATION

TYPE OF MEMBERSHIP	ANNUAL FEE
A	\$15.00
B	4.00
C	TYPE 1 _____ 100.00 TYPE 2 _____ 200.00 TYPE 3 _____ 300.00 TYPE 4 _____ 400.00
D	40.00
E	2.00

EXPIRES DEC 31, 1990

CUT ALONG DOTTED LINE AND MAIL WITH MEMBERSHIP FEES

NAME \_\_\_\_\_ TITLE \_\_\_\_\_  
 ORGANIZATION \_\_\_\_\_  
 MAILING ADDRESS \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
 TELEPHONE NUMBER (WORK) \_\_\_\_\_

NOTE: TYPE C MEMBERSHIP-INDICATE # OF NEWSLETTERS WANTED \_\_\_\_\_

SEND APPLICATION AND FEES TO:

Correctional Industries Association  
 The Council of State Governments  
 P.O. Box 11910  
 Iron Works Pike  
 Lexington, Kentucky 40578

NEW  
 RENEWAL





*Published by:*

**Correctional Education Association  
and  
Correctional Industries Association**

*in conjunction with*

**Department of Correctional Services  
Training Resource Center  
Eastern Kentucky University  
217 Perkins Building  
Richmond, Kentucky 40475-3127  
(606) 622-1497**

© 1990