

ABSTRACT

HIGH VOLUME, MEASURABLE COMPUTER ASSISTED SUBSTANCE ABUSE/PSYCHOEDUCATIONAL

REHABILITATION PROGRAMS FOR LARGE INMATE POPULATIONS

The orderly management of a prison depends upon the provision of effective programs for inmate populations. Properly structured and verified, correctional rehabilitation programs can serve as potent inmate management tools. Equipping prisons with high volume quality programs demonstrates staff concern for inmates and permits prisoners to find meaning in their incarceration. Program which offer hope, provide for individual growth and give inmates something to work toward, heighten commitment to acceptable forms of behavior within prisons.

As a result, prison populations actively involved in effective rehabilitative programs pose fewer security and administrative problems. In 1996 over one million one hundred eleven thousand Americans were behind bars. One State estimated that 80% of their inmate population had been incarcerated for substance abuse related offenses. Inmates sentenced for drug offenses accounted for 44% of the increase in prison population from 1984 - 1991. The substance abuse problem faced by our society is massive. Attempts to bring large numbers of dangerous substance abusers under control has resulted in increasingly intense pressure on and overcrowding of our prisons. The steadily increasing has escalated to astronomical proportions. For example, the budget for adult corrections throughout the U.S. back in 1996 was in excess of twenty seven billion five hundred and sixty five million dollars.

Despite these enormous expenditures, only about 5% of inmates with substance abuse problems in our prisons received any kind of help overcoming their substance abuse problems. Untreated inmate substance abusers are a huge problem to both society and prisons. Often being released from prisons with little money, few if any relapse prevention skills, and no place to go to, recidivism rates have soared to unacceptably high levels. During incarceration, substance abusing inmates are one the most violent and disruptive segments of a prison population. Drug related gang activity, assaults on other inmates and staff along with diseases spread by IV drug use account for substantially elevated inmate medical costs to prisons and indirectly to tax payers. Attempts to provide treatment and substance abuse education for the huge numbers of inmates with substance abuse problems through expensive, low volume conventional methods have clearly failed. The inability of traditional substance abuse treatment formats to process more than just a few inmates at a time and their high operational costs render them hopelessly incapable of ever providing for the needs of more than a million inmates currently in U.S. prisons requiring services.

Today's prisons need high volume, large scale, inexpensive, staff efficient programs that fit into and are survivable within today's prison environments. Past experience has clearly taught us that validly measured program objectives must be a part of any such inmate program. To assure that inmates in deep denial of long-standing problems and resistant to treatment learn anything at all their progress through programs must be clearly and objectively measurable. Programs which assist inmates to face their problems prove painful for participants when denial systems are dismantled and the guilt and pain associated with their past actions and current incarceration becomes more real. Like any living being, prisoners will avoid such pain if possible.

In the case of inmates, the truth often hurts a whole lot more than for the average guy. Consequently, inmates will avoid at all costs programs that cause them to examine their mistakes, wrong decisions and the pain they have caused others prior to their incarceration. To avoid the intense discomfort of having to face the truth, inmates often avoid listening to lectures, group therapists or others attempting get them to confront their problems. If inmates are not tested with regard to what they are supposed to be learning in these kinds of programs, the chances are they will learn little or nothing. They will continue to avoid the painful task of facing themselves for as long as possible. The truth of this is born out every day when some of the nastier inmates are placed in prolonged isolation. They cannot stand their own company. They demand or create distractions in order not to have to be alone with themselves and their problems. With non-tested programs, they will play the game while carefully avoiding the assimilation of the painful information about themselves and their behavior. Many hate themselves. Unless they build on a solid foundation of truth, from ground zero they are living a delusion which will quickly collapse resulting in further incarceration.

Unless inmates are given the opportunity to see themselves as they really are without all the defenses, walls and games, there is little chance that they will be able to build solid foundations for change. Without validly measured learning objectives, large numbers of prisoners will circumvent program goals maintaining their denial systems intact and avoiding the pain associated with facing their tremendous problems. The problems associated with the development of a validly measurable, high volume correctional program, for prison populations were formidable. Even after 14 years of steady developmental progress toward such a target program, serious problems continued to defy solution. Despite repeated attempts at managing large inmate programs by traditional methods, the problems encountered mocked our attempts to find solutions.

The severe problems encountered could not be solved without the assistance of computers. After years of experimentation and program development, a motley lab of inexpensive, surplus 8088 computers was set into operation with a basic test randomization software package and development of an automated cheat proof rehabilitation program format continued. A long, painful cat and mouse

game with inmates followed. Each some of the sub-programs added to the software package to prevent cheating were circumvented. If they could not beat one segment of the program, they went to work on another.

Time after time they found different ways to beat the system that required the construction of another software subsystem as a countermeasure. It was as if we were facing a huge, powerful collective inmate mind. Although the names and faces changed, their purpose was steadfastly the same, to beat the system. Because of their ability to adapt and the brilliantly innovative methods inmates devised with which to cheat there were many times where we felt that developing a practical solution would be impossible. There were even more times we just flat felt like giving up. It was much easier to run ineffective traditional groups that no one questioned. Only recently was birth given to a fully functional, completely new generation of correctional rehabilitation program format, the Computer Assisted Program.

Check mating the combined inmate psyche with a system which could validly measure fairly precisely what hundreds of inmates were learning in a weeks' time required many years and thousands of hours of dedicated effort. The finished program however performed beyond expectation. Today, more modern versions of the first Computer Assisted Programs are operating on the front lines of several U.S. prisons. Some of these systems are processing close to 300 inmates a WEEK through validly tested, large scale rehabilitation programs. For the first time, prisoners were facing a system that they could not manipulate or cheat their way through. Their initial reaction upon facing these systems was very interesting.

Their initial reaction upon being confronted by these systems was interesting. When a computer assisted program lab is first implemented, inmates routinely test the system to see if it can be beaten. They constantly search for a path of least resistance. When they discover that cheating is not possible, it is only then that they begin to study in earnest. With any means of cheating completely blocked and the presentation of even a slight reward, inmates began on their own to assimilate massive amounts of programmed information. In order to learn this much information, thousands of hours of inmate time each month had to be in the peaceful, productive study. Study material is delivered to the inmate in the form of inexpensive, non-copyrighted study booklets which are lent to the inmate for study. Prisoners have been seen studying in their cells, in the library and at work when things were slack. Inmates are in effect finding their own classrooms in the most comfortable or convenient places they can locate.

Instead of watching television or being bored, with structured study booklets in hand, thousands of inmates are quietly confronting the reality of what went wrong in their lives in relative privacy. Their denial systems are being dismantled at an unprecedented rate, readying prisoners for far more intensive, lower volume, more expensive group therapies. Large numbers of inmates are greatly relieved

when they find the program consists of studying programmed material in the privacy of their cells at their own rate. Many are uncomfortable with or fear exposure in traditional group therapy. They fear the reactions of other inmates to their crimes or being labeled as weak if they express emotion other than anger. Others fear therapists hunting, probing and attempting to get them to expose their crimes and lower their defenses and reveal their problems and weaknesses in front of other prisoners. Many inmates serious about getting help are relieved to discover that they can quietly read on their own without having to expose themselves to the potential harm that other untrustworthy inmates could cause with some of the more private information intended for exposure in group therapies. Anonymous evaluations of inmates who have completed Computer Assisted Programming are consistently positive. Administratively, the program is a dream.

Developed specifically for the unique programming needs of large correctional populations the system automates virtually all aspects of inmate testing while at the same time maintaining strict control and validity over the testing of inmates. Test administration, scoring, data banking and resetting for the next test is fully automated. Since the inmates and the computers are doing virtually all of the work associated with these programs, the amount of staff time required for their continual operation is shockingly minimal. The software package is easy to learn and can be fully customized or programmed to test over virtually any user created study booklet program, commercial books or hand out material. The system allows for the formulation of test questions at different levels of difficulty which permits the evaluation of different levels of student comprehension. In addition, user customization also permits prison treatment specialists to create their own unique psycho-educational programs over virtually any topic they feel might work with prisoners and to validly test over the same.

Different State prisons currently using these systems immediately began developing and trading study booklet programs of their own creation. The distribution of labor and free trade of programs between prisons drastically cuts down on the cost of providing programs to prisons over having to purchase similar, high priced commercial products.

Unlike conventional low volume prison programs, Computer Assisted Programs have the potential to provide programming to a full 70% of our current inmate populations. This is a vast increase over the 5% of inmates who are currently receiving some kind of treatment prior to release. From inception, the main motivation for the development of these systems was the overriding concern is that prisons as they currently exist are far from adequately addressing the problems of the massive numbers of inmates under their charge. Large numbers of inmates are leaving our prisons in much worse shape than they were sent in. They are coming out angrier and more resentful toward society than ever to become our neighbors. By the millions, they are sharing our roads, supermarkets, movie theaters and stores.

Any one of them might be a seething volcano in the guise of the man in line next to you as you buy a gallon of milk at the local quick mart. All of our lives are directly affected. We are all inextricably connected. Its time we stop burying our heads in the sand and do something realistic about the increasing crime rate. Politicians getting tough on crime and sending people by the millions to these gladiator schools we call prisons is not lowering the crime rate. Something has to be done. After over fourteen years of listening to many different prison administrators and the problems they have with providing large scale programming, we took every significant point brought forth into account. We then set out to totally eliminate the problems, effectively minimize or contain them. One problem consistently stated was the high purchase price and maintenance costs of programs large enough to have some kind of impact on the inmate population.

Wardens with inadequate funding complained they were charged with the safe and secure operation of large prison units with inadequate funding and supplies for their security officers. Some prisons had inmates sleeping on mats on the floor.

Given the basic mission of prisons, the safe and secure confinement of dangerous inmates, programs requiring large amounts of money or space are not a priority.

This must be made clear.

The vision from inception of this computer assisted package was to make programs available to prisons at a reasonable cost and making such systems affordable to financially pressed institutions. It is hoped that one day prison facilities across the U.S. will adopt the idea of utilizing used computers to provide low cost, high volume rehabilitative programming to inmates. If the evolution of a society is measured by how it treats the least among its members, there is still much room for improvement in the United States. The technology to provide efficient, cost effective rehabilitative programming to is available. If the people who work within the prison systems, who understand the problems outlined here better than anyone else do not take the steps necessary to make positive changes within our prisons then who will? If not now, when?

PUNISHMENT IS INEFFECTIVE WITH SUBSTANCE ABUSERS, REASONS WHY:

Higher recidivism has clearly been associated with harsher prison environments.

Persistently high recidivism rates obviously indicate that without some type of intervention other than punishment, large numbers of inmates cannot

successfully address the problems that led to their incarceration. Incarceration costs have become staggering. An understanding that punishment alone is not the most efficient, cost-effective or humane method of dealing with substance abusing prisoners cannot be denied. Prisons would have a hard time punishing substance-abusing inmates more than they have already punished themselves.

By the time these people hit prison they have lost virtually everything of importance in their lives. Often included on this list of losses are their families, possessions, health and freedom. Many have already failed in traditional substance abuse treatment programs by the time they hit prison. The need for prisons to implement some kind of large-scale treatment or programming other than confinement and punishment is clear, but there is much confusion about what actually works with prisoners and little viable research. One thing however is very clear. If you cannot measure program output, you have no realistic means of knowing if the program is working. When working with these difficult, deviant populations in mass denial, assuming a program is working doesn't cut it.

-TREATMENT REGIMENS DESIGNED FOR COMMUNITY POPULATIONS ARE IMPORTED INTO PRISONS FOR USE WITH A VASTLY DIFFERENT POPULATION AND AN ENVIRONMENT THAT THEY WERE NOT ORIGINALLY DESIGNED FOR:

Lack of research specific to the unique and difficult problems associated with the treatment of large prison populations forced prisons to import and rely on traditional community treatment models. The vast, unrecognized differences between community treatment populations and prison substance abusing populations render traditional treatment approaches largely ineffective.

Community treatment modalities are not designed for and are just not applicable to the treatment of prison populations. Traditional treatment approaches are high cost, low volume, staff intensive, objectively difficult to measure and very easy for prisoners to circumvent. Many treatment people assume that if inmates are merely exposed to reason and information, they will learn and change. Nothing could be further from the truth. They were not counting on the strength of the inmate denial systems or the many disincentives to program within a prison environment.

In addition, community based treatment models were never designed to be used with prison populations.

They were developed for use with community populations, a vastly different population. Community populations are less chronic, more functional, more motivated, more trusting; often have jobs, families and lifestyles, which are dependent on their recovery. Community populations very often have much to recover for and are much more motivated to recover. On the other hand, the

typical substance-abusing prisoner has lost virtually anything of worth to him by the time of his incarceration and has little incentive to recover. Drug use has often rendered reason largely ineffective and the pain of his incarceration coupled with his strong denial system makes many prisoners much less likely to voluntarily listen to anything having to do with the objective truth of his situation.

Prisoners often blame everyone but themselves for their circumstances. In addition, continued drug use is often fostered within prisons by harsh, punitive environments and readily available drug sources. Within these environments are often utilitarian as an escape from reality. There are many other disincentives within the prison environment to programming. Unlike the typical community client who has to remain functional and responsible enough to hold a job and feed himself and his family and keep a roof over his head, the typical prisoner gets free room and board. He can make absolutely no effort to straighten himself out and is still provided with food and housing, recreation, social membership in a gang and some semblance of medical and dental care.

Under these circumstances, why would a chronic substance abuser in deep denial, fearful of facing his problems and convinced that others are the cause of most all of his troubles make any effort at all toward rehabilitating himself? Whether the prisoner makes any effort to straighten himself out or not usually does not impact at all the psychological sewer in which he has to dwell. These are only a few of the disincentives to correctional programming.

-TRADITIONAL SUBSTANCE ABUSE TREATMENT APPROACHES WHEN IMPORTED INTO CORRECTIONAL ENVIRONMENTS FAIL FOR SOME OF THE VERY SAME REASONS THEY SUCCEED WITH COMMUNITY POPULATIONS:

Conventional treatment approaches are much too low volume and expensive to have any realistic prospect of ever providing treatment to the massive number of prisoners needing such services. Although these programs have surface validity, they are not effective with prison populations. Components critical to the success of traditional group therapies (i.e. trust, openness, expression of feelings, caring) are rendered ineffective within prison populations due to the unwritten rules of the inmate culture. This culture is little understood by community substance abuse program vendors, commercial program developers and contractors.

The traditional mainstay of conventional therapy is group therapy. Within the prison environment, personal information revealed in a group all too often ends up as common knowledge on the prison yard the next day. Inmates displaying feeling or emotion in front of other prisoners within a group treatment situation are considered weak and marked for extortion. Many inmates attend groups only to get out of their cells or to talk to friends.

They could care less about what staff intends the group to be used for. One of the most difficult problems facing any kind of treatment regimen within a prison setting is the dismantling of extremely strong inmate denial systems. If inmates are permitted to deny their myriad problems, they will continue to believe that there is nothing much wrong in their lives that need to be changed. Such a perception will result in continued denial and little motivation to change. In order to bring prisoners face to face with the reality of their situation, chronic denial systems must be cracked and dismantled. Confronting these massive denial systems with traditional group therapy is extremely time consuming, very frustrating, inefficient and extremely expensive.

It can also be very uncomfortable for all involved. In addition to other problems faced by group treatment formats in prison, all too many inmates have had previous failures with traditional substance abuse treatment regimens that have severely shaken their faith in such methods. If a system is not put into place to help inmates confront and deal with their problems, they will maintain a status quo and remain unchanged.

There are many factors that contribute to this. Whether inmates attend prison treatment programs or not they still get three square meals a day and a roof over their heads, medical care and their basic necessities met. As such, many inmates find continued drug use functional in coping with hostile prison environments. In addition, prisoners do not have to participate in treatment and become functional in order to support themselves, as is the case with many community clients. All of these factors and many more not mentioned add up to substance abusing inmates having little innate motivation to change or program.

In combination, the inmate culture, exceedingly strong denial systems, inmate non-motivation and criminal life styles when coupled with traditional, non-measurable substance abuse programming is a setup for failure.

Traditional group therapy and lectures, the most heavily utilized treatment approaches within prison settings are extremely easy for non-motivated inmates in deep denial to get through without having to learn anything. If program outcome and learning objectives are not validly measured, it cannot be assumed that prisoners have learned anything at all upon completion of conventional non-tested programs. In many traditional programs, virtually the only thing that is measured is attendance.

If testing is implemented, it is resisted vehemently by inmates who do not feel they have a substance abuse problem and consequently should not be made to suffer through a program for a problem they do not have. After all, if it wasn't for the other guy, they would not be in this mess. The extreme difficulty encountered when one attempts to validly measure learning outcome of large inmate programs causes most program managers to back away from attempting valid measurement. Surface validity of traditional programs gives the distinct

impression that these methods are working with inmates. When exposed to the light of objective measurement however, the massive failure of traditional treatment approaches when applied to inmate populations becomes very clear.

-REALISTIC PROGRAMMING FOR PRISONS SHOULD FIT INTO AND BE DESIGNED SPECIFICALLY FOR THE UNIQUE NEEDS OF CORRECTIONAL ENVIRONMENTS:

Most prisons these days are in dire need of more physical space. Staff members struggle to gain access to what little space is available for various activities. Programs which require continuous use of even moderate amounts of physical space are not welcome. In addition to being short on space for programs, many prisons are also acutely short on staff of all kinds. Even in the face of security shortages, traditional treatment programs often expect prisons to create expensive artificial islands within the correctional environment to accommodate them.

Battles often rage between these islands and security staff over anomalies and security infractions. Accommodating large traditional programs within a highly secure environment is expensive, inconvenient, space intensive and sometimes a threat to security. Realistic prison programs must be designed to fit the Spartan demands of current correctional environments and have the capability to not only survive but to operate successfully in these environments long term. Since it is unlikely that the way prisons are operated in the U.S. will change drastically any time soon, it is incumbent upon the program developer to take into account the reality of how prisons are currently operated and design systems, which can survive within these uniquely harsh environments.

Program survival within prisons today demands that program design control for: initial costs, maintenance costs, space requirements, inmate volume, staff time expenditure, measurability, program quality, flexibility, relevance to inmate problems, and provide for wide spread standardization. In addition, these systems serve a secondary function as potent inmate management tools due to the fact that they can provide services to very large numbers of prisoners and productively occupy massive amounts of inmate time in rehabilitative programming.

Many traditional substance abuse programs occupy very few inmates for relatively short periods of time at high cost in terms of staff time, money and space. Due to these factors and others, the traditional inmate treatment program is ineffective as an inmate management tool for administration.

-THE SEARCH FOR AN INEXPENSIVE, HIGH VOLUME INFORMATION DELIVERY SYSTEM:

In order to increase the scale of inmate rehabilitative programming to a level large enough to have a realistic positive impact on massive inmate populations and recidivism rates, an inexpensive, high volume method of getting great amounts of programmed information to inmates had to be found. Years of experimentation with different information delivery system ensued. All formats experimented with were higher volume delivery systems than traditional groups or lectures.

All but one could not meet the stringent, reality based requirements set for the development of a successful program format designed specifically to operate within correctional environments. Ruled out as unrealistic were didactic lectures (low volume, difficult to measure, staff and space intensive).

Commercial books (expensive, stolen, deteriorated with hard use); Video tapes (expensive and inflexible), required equipment some units did not have. Formal repetitive classes (staff intensive, repetitiveness led to staff burnout, space intensive, low volume), and lastly audio tape labs whose stolen tape recorder motors and converters proved a great boom to the inmate tattoo industry. Format after format was carefully examined and disregarded. After years of experimentation, a very large scale, inexpensive, flexible, high quality, expandable, easily modifiable, information delivery system was developed. Relatively simple compared to most of the others tested, this format permitted correctional staff with absolutely no knowledge of program subject matter to administer high quality, large-scale rehabilitation programs. All program expertise was built into the program information delivery system. No classrooms or expensive equipment were needed. Program materials could be reused, significantly cutting down on program maintenance and operating costs.

Staff time previously expended spoon-feeding information to inmates, who often were not interested in hearing it, was reduced to almost zero. Standardization was inherent in the design of the program and inmates transferred from one institution to another could pick up with the same program at the same exact place they had left off at their previous institution. When this system was first implemented, the number of inmates involved in rehabilitative programs soared to previously unprecedented levels. Best yet, this same information delivery format can be created by correctional social service staff at little cost other than staff time for development.

The potential for creating a vast number of different kinds of programs with this format is there. The simplest of all information delivery systems tested, the take home study booklet program information delivery system was the clear winner. Inmates would take back to their cells study booklets created by Psychology or Social Work staff and study them at their own rate for as long as necessary.

Program validity was at first maintained through conventional paper and pencil group testing on a weekly basis. While such testing could be validly maintained, inmates were spending hundreds of hours per week studying programmed material.

Prior to the eventual failure of paper and pencil testing as a tool for testing large inmate rehabilitation programs, this information delivery system in combination with valid testing proved itself a potent inmate management tool. The combination of a large scale, tested study booklet program clearly demonstrated its ability to occupy hundreds of inmates for amounts of time sometimes approaching one thousand hours per month. Valid testing was the key to the programs' success as an inmate management tool. Testing assured that inmates were actually studying and learning programmed material. Without valid testing, many prisoners in denial of their problems would not voluntarily learn programmed material that disrupted their denial and defense systems. With untested programs, inmates spent the smallest amount of time necessary to get by, with many spending no outside time at all studying. In order to assure that inmates learn anything at all in programs, program testing is absolutely essential.

Testing inmates who do not feel they have a serious problem and have little motivation to learn programmed material has historically proved extremely difficult. With large inmate programs inmate resistance to testing becomes so still that measurement becomes almost impossible. Conventional paper and pencil testing of prisoners has always been troublesome and problematic. Such conventional forms of testing were marginally functional with relatively small, low volume inmate programs such as a GED class. However, when program volumes were brought up to the levels to which the take home/study booklet information delivery system could perform, severe and seemingly unsolvable problems were encountered with program validation (testing) and administration (staff burn out and administrative complaints). Many of these problems were due specifically to the unique nature of prisoners within prison environments, their massive denial systems, their practice at cheating and beating the system, inmate resistance to testing and the extremely high volume of tests generated by program participants. It was not long before we realized that inmate motivation to cheat was a constant and never changing factor that had to be dealt with as a cost of operating large-scale programs. It also became very clear that programs of the size we were experimenting with involving hundreds of inmates per week could not be validly tested for any length of time using predictable paper and pencil tests which were easily defeated by prisoners.

CONVENTIONAL PAPER AND PENCIL TESTING METHODS CANNOT MAINTAIN HIGH VOLUME PROGRAM VALIDITY LONG TERM WITH INMATE POPULATIONS WITHOUT VALID, OBJECTIVE TESTING. WITHOUT TESTING, CORRECTIONAL PROGRAMS SERVE NEITHER A REHABILITATION OR AN INMATE MANAGEMENT FUNCTION. REWARDING

PRISONERS FOR COMPLETING PROGRAMS THEY CHEAT ON OR GROUPS AND LECTURES THEY SLEEP THROUGH REINFORCES ANTISOCIAL BEHAVIOR AND ENGENDERS INMATE DISRESPECT FOR THE SYSTEM.

Valid testing of substance abuse and other psycho social programs assures that inmates in stark denial of the problems which brought them to prison will confront problems which they have successfully avoided for years. Valid testing converts programs into an active process, giving the inmate no option but to immerse himself in the programmed material and learn about what went wrong in his life and what to do about it. Legitimate testing of inmate programs requires inmates to spend much more time and effort learning program material. They cannot passively sit through a group or lecture daydreaming.

With less aggressive programs it became clear that many prisoners will take the path of least resistance and get through a non-tested program as quickly and easily as possible. Finding this kind of inmate behavior to be obvious and wide spread, program testing was implemented in early program models in the only way available. Inmates were given paper and pencil tests as a group. Legitimate testing assured that inmates would put forth the necessary effort to master the informational objectives built into the program. It was only testing which insured that instead of watching television or reading westerns at night, inmates were instead spending substantial portions of time studying such topics as relapse prevention, parenting and drug and alcohol education.

After years of only being required to expend enough effort to sit through a lecture, inmate reaction to having to meet strict, objectively measured learning objectives was not welcome and met with stiff resistance, hostility and constant demands for a return to the easier lecture or group formats. This hostile behavior was ongoing until tested programs became an accepted part of institutional operation.

We never conceived that years later inmates would be signing onto waiting lists for programs that were processing in excess of two hundred inmates a week. However, at the time we were switching over from groups to tested programs, inmate hostility at having to work harder in programs and objectively confront their problems and denial systems was constant and volatile. Their massed reaction contributed greatly toward wearing down and burning out programs staff. Their constant negativity toward tested programs fostered a distinct distaste on the part of staff for the job of managing large manually tested programs. In addition, perceiving that staff could be manipulated into concede a point here and there on manually tested programs, inmates constantly verbally battered staff into doing just that.

This inmate behavior was incessant and nerve-wracking on program management staff. Inmates, unable to gain sufficient ground in this area as

program managers held their own, quickly responded to tested programs with a technology of their own. They began fabricating miniaturized cheat sheets in great numbers. This means of cheating on predictable hard copy program tests was extremely effective. The skillful application of these crib sheets threatened to short-circuit the intent of social service staff that inmates actually learn something from programs. Easy to construct, duplicate and miniaturize the cheat sheet became the most widespread and effective method inmates found for circumventing rehabilitation programs.

For large numbers of them, years of cheating their way through school yielded skillfully constructed cheat sheets. Inmates proved themselves to be finely polished masters in the art of cheating, circumventing the system and beating tests. In large numbers of cases, inmates spent more time constructing and disguising these cheat sheets than it would have taken to legitimately study for and pass the program test they were preparing to cheat on. Confronting potentially volatile inmates caught using cheat sheets or attempting to cheat by other means became a constant, unpleasant and nerve wracking ordeal for program managers who could not tell how inmates would respond upon discovery.

Despite the previously mentioned distasteful aspects of large-scale program operation within the prison, another problem emerged which seriously threatened the further evolution and future of large-scale inmate rehabilitation programs. If a solution could not be found, large scale clinical and substance abuse programs for inmates would never become a reality. As mentioned previously, the testing of these large programs involving great numbers of inmates had always been problematic and at times had utterly failed necessitating the shut down of entire programs. Up to this time, without a doubt the most successful part of the system was the large-scale information delivery system, (the take home study booklet format). These booklets and the massive amounts of information they contained could quickly, easily and economically be expanded to include as many inmates as the program manager wanted to copy booklets for.

In many cases programs were expanded in size far beyond staff capacity to manually grade and process the hundreds of tests that resulted as inmates tested over hundreds of inexpensive study booklets issued to them. In some cases, the numbers of tests that had to be manually, scored and data banked numbered into the thousands per month. Previously enthusiastic program staff found themselves overwhelmed and stuck with the extremely boring and time consuming job of hand scoring, recording and destroying hundreds of hard copy inmate tests every month. Already overworked program staff unable to grade and organize the massive numbers of tests waiting for processing. This resulted in large numbers of tests in various stages of processing building up into piles scattered around in staff offices. These stacks of hard copy paper and pencil tests proved easy targets for inmate theft and distribution. Stolen tests circulated

around prison yards becoming a unique brand of inmate currency. Prisoners would trade stolen tests for candy bars, soda, cigarettes etc.

This black market sale of program tests vastly complicated the problem of maintaining program validity. Program tests were being woven into the inmate economic system as currency. Having attained the status of a kind of low-grade inmate currency, inmate motivation to steal and distribute tests was incessant. Inmate tactics designed to obtain tests were as varied and ingenious with cheat sheets being only one of the tricks in their repertoire. The result was consistent across all programs around the state within six months to a year of manually tested program implementation enough tests were in the possession of inmates to completely invalidate the program.

With each program certificate handed out to an inmate who cheated their way through the program, the system was reinforcing criminal, anti-social behavior and cheating. Large-scale programs were yielding astronomically large-scale problems.

Despite Herculean efforts to maintain valid testing and thus program validity, staff became overwhelmed by the sheer volume of tests needing to be manually corrected which were generated by these large programs. The boring task of hand scoring hundreds of inmate tests, manually recording test information, shredding graded tests and confronting a never ending series of potentially violent cheaters overwhelmed and discouraged previously enthusiastic programs staff. Maintaining the conditions required for valid operation of these large, hand scored programs, burned out staff across all programs and locations. There were many other special projects staff could involve themselves with which were much easier and required much less time and effort. The stark reality remained that in order to assure that inmates in chronic denial of their problems were learning anything at all in programs, valid program testing was absolutely essential.

If a means of solving program validity and staff burn out problems could not be found, programs would be forced to shut down in lieu of reinforcing criminal behavior. Who knows how many years it might be until such an approach would be attempted again. It appeared that both contractors and administrators in many prisons were perfectly happy with the 5% of inmates receiving treatment at prohibitive costs. Without a solution, untested lectures and groups would prevail.

Critics would continue to assert that rehabilitation does not work with prisoners and clamor for longer sentences and more prisons. To a large extent they would be right. More money would be thrown at the problem and gobbled up by contractors who would run bigger programs with more groups and greater numbers of prisoners daydreaming their way through. Why should these people risk the myriad problems associated with testing inmates when the money was freely flowing without all the nightmare problems associated with objective validation of learning outcomes?

The bottom line is that traditional methods of rehabilitation do not work with prisoners. Post tests of traditional group and lecture formats clearly demonstrated that inmates were assimilating only a very small amount of the information being presented to them. Some were learning virtually nothing at all, yet the cost of teaching them nothing proved pretty hefty.

*****THE INCEPTION OF THE COMPUTER ASSISTED PROGRAM FOR INMATE POPULATIONS*** WITH NO OTHER OPTIONS available TO ADDRESS THE PROBLEMS ASSOCIATED WITH THE VALID OPERATION OF LARGE, MANUALLY TESTED, INMATE PROGRAMS, A TURN IS FORCED TOWARD COMPUTERIZATION. CONSTRUCTION OF A SOFTWARE PACKAGE SPECIFIC TO THE PROBLEMS ENCOUNTERED IS BEGUN. STAFF BURN OUT, MAINTENANCE OF PROGRAM VALIDITY AND INMATE CHEATING ARE SPECIFICALLY TARGETED BY SOFTWARE DESIGN: -ADDRESSING THE PROBLEM OF INMATE CHEATING THROUGH SOFTWARE DESIGN:**

If inmates are able to cheat their way through a program and are then awarded a certificate of completion, prisoners are actually being reinforced for the very same kinds of criminal behavior which brought them to prison in the first place.

It cannot be safely assumed that inmates will have learned much of anything from a group or program through mere exposure. To assure that inmates are learning anything at all, valid testing of programs is absolutely critical. Valid testing, when applied to inmate populations translated into the necessity of designing a system which could not be defeated by the ubiquitous inmate cheat sheet and other nefarious schemes. In analyzing the reasons that inmates were able to so easily defeat traditional paper and pencil tested programs it was clear that the predictability of the position of the test questions and their answers made cheating easy.

This information could easily be copied onto a hand, leg, shirt sleeve or scrap of paper and smuggled into a group test session. When finished cheating, test information would then be given or sold to other inmates being distributed in geometrically increasing proportion to the number of successful cheaters. To complicate matters, paper and pencil tests existed in a form that easy to steal. It was essential that these problems be countered in the design of the emerging software program.

To address these problems the following features were designed into a newly evolving software program: (1) a double randomization feature was developed which instantaneously selects test questions totally randomly from a large test question data base for presentation onto the computer screen. This feature prevents inmates from ever being able to predict the order of the test questions

presented to them. The more test questions placed into the data bank for a particular test, the more secure and unpredictable the system was. In addition, a second randomization feature was also added. The program was designed to randomly scramble the position of the multiple-choice test question answers each time a question was presented on the computer screen. Between the randomization of test question presentation and the scrambling of their associated answers, the computer automatically generated millions of test question permutations.

Such double randomization precludes any possibility of predictability and eliminated the effectiveness of cheat sheets which relied on such predictability. Early tests validated that the double randomization of test questions rendered the use of cheat sheets totally ineffective. This computer controlled chaos assured that the same test run on two computers side by side would necessitate the inmate to answer different test questions. Prying eyes looking at a friend's computer screen will not find the same test questions presented or the answers in the same order even if both inmates are taking the same test at the same time. Consequently, copying the answers from a friend's computer, or any system of signals that inmates could arrange between themselves for the purpose of cheating would also be short circuited. With each test being uniquely generated, any inmate faced with taking a computerized test could expect no help from anyone or anything. His testing ordeal would be a unique and personal matter reflecting the inmate's efforts back to him with brutal honesty.

Under no circumstance would the computer issue an inmate a passing score if he did not learn the program information he was responsible for. Nor would a computer pay any attention to even the slickest, silver tongued inmate manipulation making a case that something about the test is unfair and his score should be raised. (2) Since the computer program generates, administers, scores and data banks all tests electronically there are no hard copy tests inmates to steal or copy. High paper costs associated with ongoing paper and pencil testing of large programs was totally eliminated. This feature alone would save the cost expended to implement one of these programs within a year. Computer assistance assured that inmate tests were scored immediately upon completion and resultant scores were flashed to the computer screen giving inmates immediate feedback.

This is a popular feature for the many inmates who demand immediate gratification. (3) For those inmates who prepared inadequately and then attempted to guess their way through a test while others waited to get into the lab, a timed test feature was created. Each inmate was given fifteen minutes to take a twenty-question test before the computer shut down, locked up and sounded an alarm.

This feature maintained a brisk flow through the labs. The design and successful automation of these features knocked out 95% of inmate cheating, maintained

program validity, high program volumes, a smooth flow of inmates through the lab and valid measurability of program objective. In addition, the programs utility as both a rehabilitation and inmate management tool for administration was preserved intact.

-ADDRESSING STAFF BURN OUT THROUGH SOFTWARE DESIGN:

The problems encountered with staff burn out were countered through fully automated testing, scoring and data banking of all test information. The system proved so efficient that with computer assistance the operation of large rehabilitation programs turned from being one of the most painful, time consuming and boring tasks to one of the easiest. With the computers doing virtually all the work all that remained for the program manager to do was to start and shut down the computers and monitor the testing lab during operation.

Computerization of testing reduced staff stresses in a number of other ways. Since inmates can't cheat on these computer-assisted programs the need for staff to suffer through the tense situations associated with confronting potentially violent inmate cheaters was eliminated.

Incessant inmate attempts to manipulate staff into giving them a score higher than they deserved was terminated. This saved much wear and tear on staff nerves. Inmates knowing that they could not con or manipulate a computer did not try.

Inmate arguments with staff over the unfairness of test questions were eliminated with a program design, which purposely did not give specific feedback to inmates with regard to which questions they missed. Inmates were permitted to take tests over again at later times to increase their scores if they were not satisfied with their original score.

The software interface was designed to be user friendly in order not to intimidate even the most non-computer literate of prison personnel.

The system is so efficient that it requires very little staff time to maintain the operation of a large-scale program. This feature permits prison staff to operate very large rehabilitation programs with minimal interference of other assigned duties. The program virtually administers itself. In actual operation, a computer lab consisting of ten, old personal computers (8088's) costing as little as \$150 each proved capable of processing 60 inmates per hour through a variety of validly tested, computer assisted rehabilitation programs. A survey of 120 inmate participants revealed that on the average approximately 3 hours of inmate time were expended in preparation for a single ten-minute computer administered test.

A ten-computer lab taking one hour of staff time to operate demonstrated a potential rate of return of approximately 1/180 hours. In short, 180 hours of inmate time were expended in study and test preparation in exchange for the one hour of staff time required to monitor lab operation. Inmates taking study booklets to their cells and studying them intensely were virtually rehabilitating themselves. Unlike traditional programs which often move at a fixed rate, with these self study programs, inmates could move at their own rates.

Prisoners often studied at night and in the evening when prison staffing was at low ebb. Since treatment staff are not directly confronting or threatening inmate denial systems with these programs, there is little resistance on the part of the inmate with regard to assimilating presented material. By about the third program section, inmates realize that they are learning about themselves and their problems without having to participate in potentially stressful and threatening therapy groups with other inmates that they do not trust. As the program progresses, inmate denial systems are slowly dismantled as prisoners come to the conclusion that they do have a problem and that there is hope that they can do something to change their lives for the better.

Programs that offer hope foster gratitude on the part of prisoners and not the resistance and resentment engendered by direct confrontation of denial systems used by many traditional prison treatment programs. While computer assisted programs proved popular and effective with the inmates, it was clearly understood that such acceptance alone would not be sufficient to gain favor with prison administration struggling to find money to keep their security forces at least half way decently outfitted. To keep program costs down, this system was specifically designed to operate on older computers, which are currently being trashed or relegated to government surplus warehouses in great numbers. Even the older 8088 computer that governments are throwing away is capable of testing six inmates an hour over comprehensive rehabilitation programs much faster than an inmate could possibly take a test.

A lab of ten of these inexpensive computers is capable of processing sixty inmates an hour through a variety of different rehabilitation programs. There are currently labs in operation within state prison units at this time which are processing close to three hundred inmates per WEEK through comprehensive programs such as Parenting, Alcohol Education, Aids Education, Drug Education and Co-Dependency. Of interest to prison administration is the fact that close to one thousand five hundred hours of waking inmate time have been productively occupied within the period of a single month by one of these labs. These machines responsible for administering these programs would have been destroyed by state surplus had they not been salvaged for this purpose of program testing.

Over the fourteen years it took to develop this system, the handful of people involved refused to believe that an inexpensive, efficient and effective system of

providing rehabilitation programs to large numbers of inmates could not be found. If we can develop the technology to send a man to the moon, why couldn't we develop the technology to provide rehabilitative programming to the inmates we currently have incarcerated in our prisons?

We tested the systems we sent to the moon carefully and got empirical data as to what was working and what was not. The same needs to be done with programs headed for our prisons but the resistance for some reason is very intense.

Taking into account every reason that every prison administrators in several different prison systems threw out as excuses for not providing rehabilitation programming to inmates, we began synthesizing a computer-assisted program to address each issue separately. One by one over, year after year, each complaint was carefully addressed and the roadblocks either removed or greatly minimized. At this point in time, the traditional complaints by administration regarding cost, staff time, space and security infractions have all been more than adequately addressed leaving prison administration with little excuse for not providing large-scale rehabilitation programs to inmates under their charge. Government warehouses and used computer stores are full of older computers that could very quickly be brought into use as valuable inmate management tools while at the same time providing rehabilitation programming to their inmate populations. Prison administrators do not even have to purchase commercial social services programs to run on the system.

The software has been designed to be fully programmable by the user permitting social service staff to develop their own clinical and substance abuse programs and program the computer to test over them. All but two of the computer-assisted programs mentioned above were developed by different prison systems by their own staff and programmed into this software package for testing. One program was almost totally developed by some of the more highly motivated and educated inmates. Realizing that correctional staff might not have much experience with computers, these systems were developed to be very easy to program. This feature permits corrections staff to develop and implement almost any program that can be imagined and validly test it. With such systems set into operation in our prisons, the number of inmates receiving programmed services by the time they leave prison can be brought up from the current 5% to an estimated 70%. The people who have developed this system over the years are not associated with any commercial corporation. The main motivation driving development was not profit, but a distaste with regard to having to watch prison systems either not provide programs or put programs into place which were ineffective, expensive and low volume because nothing else existed. It is not true that nothing works with prisoners, but one cannot be shooting in the dark. Virtually all behavior is mediated by learning. As such, a prisons ability to both monitor and measure what inmates are learning in programs is critical to the operation of any successful correctional program. If the way inmates think is not

changed by the time they leave prison, how can society expect any modification in their behavior?

These systems as they are currently designed put inmates in touch with reality. They educate them with regard to the factors that led to their incarceration and can teach them much more productive ways of living and being. Although the systems guarantee that program material is being learned, it is the inmate who must make the decision whether to put into action in his life what he has learned. If he does not, it will be clear to him that he is following an irrational and dangerous path. If after being thoroughly educated as to the dangers of this path, the inmate chooses to continue to pursue a course which is dangerous to both himself and society, then society has every right to protect itself.

-ADDRESSING THE NEXT THREAT TO EMERGE, INMATE HACKERS:

Having to turn to computers to solve problems with emerged with large-scale programs yielded had problems of its own. It was not long before the threat posed by inmate hackers began to emerge. These inmates range widely with regard to their computer skills and pose a constant threat to any system of computerized testing within a correctional facility. The larger the computer tested program, the greater the chance the system will be exposed to these people. In addition, inmate hackers, even if not personally interested in challenging a computer system, are subject to pressure from other inmates to attempt to break into a system if there is a benefit to doing so. It was imperative that this threat be countered and that the minds of prison administrators fearful of inmate abuse of computers be set at ease.

Once the systems were initially set into operation, inmates who fancied themselves as hackers were encouraged to attempt to break into existing systems. This kind of testing in addition to years of front line use of these systems encouraged the development of a wide variety of security systems specifically designed into this package to eliminate the threat posed by inmate hackers. The problems posed by inmate hackers was so difficult that it could not be overcome without the assistance of some brilliant computer people such as Jeff Proesis, contributing editor to P.C. Magazine and Steve Thornberg working in the corporate world. With their assistance, very powerful security subsystems were developed and incorporated within this testing system designed specifically to foil the inmate hacker, these subsystems include:

Numerous encrypted passwords.

An encryption sub program, which encrypts all program tests for storage prior to program, shut down. Tests are only decrypted prior to program initialization. Test questions are available in a readable form only during monitored program

operation. This subsystem protects program tests during the large periods of time in which the computer is in a down state.

A timed test feature prevents inmate abuse of the system when the system is operational and unprepared inmates infringe on limited lab by time trying to guess their way through program tests. Such behavior was found to be constant on the part of inmates and severely interfered with the flow of students through the testing lab.

A locked testing loop confines inmates to a small controlled part of the program during testing operations and prevents entry into any other part of the program.

Exit to DOS or Windows operating systems is blocked and can only be entered by the program manager with the appropriate encrypted password.

To further eliminate any threat from the inmate hacker, during testing the keyboard is controlled by the software system. The keyboard is prevented from taking any other input from the keyboard other than from the five keys directly associated with answering test question choices. This system blocks inmates from using the computer for any other purpose than program testing.

The entire system has been fully challenged by a very wide array of inmate hackers over the years and has come through with flying colors when the system is operated strictly within its design parameters. The aforementioned features were developed over time as each successful inmate break in was countered by the development of additional security systems. This process continued until no successful break ins were encountered for four successive years. If prison administration will assure that the system is being operated according to its design parameters, they do not have to worry about inmate abuse of this computer system. Despite these precautions, if administration is still worried about inmate abuse of these systems, disk drives can simply be disconnected or removed which blocks all means of putting anything onto the computer or anything off of the computer.

-THE FRONT END DRUG INTERDICTION PROGRAM:

Computer Assisted Programs proved to be so high volume and efficient that they quickly burned through the top 30 - 50% of the inmate population having any interest in addressing their problems through programs. The remainder of the inmate population, those in deep denial, the actively using drug abusers and gangsters having no interest in dealing with their substantial problems needed external motivation. It is with these inmates at this level of the population, more than anywhere else that the stark differences between substance abusing

prisoners and community substance abusing populations becomes very clear. The bottom 50% of the inmate population, the most chronic substance abusers, in heaviest denial are the ones least likely to seek treatment and are the most serious threat to institutional stability. These prisoners need to be identified by prison administration, rendered harmless and intensely programmed. Warden Tom House, now retired after 25 years of service with the Utah Department of Corrections has developed a brilliant plan for doing just that.

After years of studying chronic substance abusing, with regard to gang related inmates, and how they operate within prison populations, he designed an ingenious program to both reduce the institutional and security threats posed by these people and get them into programs. This system requires no extra monetary expenditure on the part of prisons and necessitates no additional resources. It's just a different way of doing things and can be implemented by virtually any warden. The tactics involve treating actively using inmate drug abusers as what they are, threats to the safe and orderly operation of the institution. Inmates with a significant history of drug abuse are tested for drug use sometime after entering the prison unit. If test results were found positive, these inmates moved into a group where they are more closely monitored and are denied visitation privileges. These privileges are denied since visitation is the point of entry for most dangerous drugs flowing into institutions.

These inmates were also denied other privileges until they had completed all the substance abuse programming available to them on the unit. Traditional treatment programs were unable to process the large flow of inmates caught in this net.

Inmates were put on waiting lists traditional groups that sometimes extended up to six months in length. In the mean time, inmates were being denied visitation while waiting for traditional group based treatment regimens to open up. Inmates made to wait this long to get their visits back grew increasingly impatient and irritable. When a computer assisted program lab was put into operation on the same unit where the Front End Drug Interdiction Program (FEDI) was operational there was no delay in processing the flow in inmates caught using drugs through programs.

Despite the great numbers of inmates being referred, student-tracking features built into the software enabled program staff to carefully monitor each inmate's progress through several different programs. One by one, these dangerous inmates were cut off from visitation and their drug sources. The result was that gang influence and assaults slackened on the prison yard. The unit became much more stable. The extra business filled the Computer Assisted Program labs, but even under such heavy loads, the labs did not bog down. There were no waiting lists of frustrated and angry inmates awaiting program entry to get their privileges back.

Without FEDI, Computer Assisted programs alone do little to motivate the bottom 50% of the inmate population in deep denial to address their problems. Without Computer Assisted Programming, FEDI overwhelms the capacity of traditional treatment modalities to handle the load, increasing inmate anger and frustration. The marriage of the two programs was the completion of a whole. When linked, upwards of 70% of entire inmate populations can be both motivated and provided prolonged, intense and high quality programming at minimal cost. Although inmates at first entered these comprehensive educational programs kicking and screaming there were no staff directly in the line of fire that they perceived they could take their anger out on. They were met face to face with a computer that cared less about how they felt about program participation. The machines were programmed only to validly test them and provide valid, instantaneous feedback over how much program information they had assimilated.

Once inmates were convinced that they could not cheat their way through this program, they settled down and began to learn the material in earnest. It was not long before they discovered they were reading about their own lives and how they had gone off track.

They learned about what alcohol and drugs did to them, their lives and their families. They began to realize how much damage they had done to their wives and children. Many inmates began to wake up to how they had fallen into the trap of substance abuse and what they could do to begin digging themselves back out again. There was no therapist banging against their denial systems that they could resist and resent. There were no other inmates rubbing things in their face.

There was no risk of saying something in a group that would end up all over the prison yard the next day. Inmates were given the freedom to study programmed booklets where and when they wanted to, at their own rate. A computer tested them once a week.

Inmate response to the program was overwhelmingly positive and the number of inmates who could be processed through these programs was extremely high compared to traditional approaches. Upon program completion, many inmates with their denial systems down or weakened began attending AA in earnest or requested therapy. This program system is based on the notion that prisoners cannot make positive changes in their lives unless they are assisted in seeing themselves exactly as they are now. As soon as their denial systems are broken through and dismantled, change occurs naturally. They don't have to be forced or struggle through groups or other treatment expensive regimens or dictated to by some authority. They just change. It is automatic. Breaking through massive inmate denial systems and arriving at these insights is quite a job and virtually impossible to do on any kind of a meaningful scale with small scale traditional program approaches. Inmates must be let to see who they have become and how they are without illusion, judgment, or resistance of any kind. They have to clearly see their place in society and their function as social beings along with

their duties and obligations to their fellow human beings. Above all, their responsibilities to themselves as individuals living with other individuals must be made clear. Once they clearly understand where they are, they can then begin to change and learn more positive ways of living. Computer Assisted Programs can be used as a high volume mechanism to show them the way. It is already happening.

The ability of computer-assisted programs to inexpensively process large numbers of inmates through comprehensive, validly tested programs is one of its main strengths. It matters little how good a traditional program is, if it only has the capacity to process very small numbers of inmates, its overall effect becomes less than a drop in the bucket compared to what is needed to positively program our massive prison populations. Fully automated, computer assisted programs on the other hand have the capacity to address the needs of almost entire prison populations, quickly, easily and inexpensively. For example, a single – ten-computer lab in current operation on a medium custody institution consistently has achieved the following: Two hundred and seventy eight inmates are continually being processed through this lab within the period of a single WEEK.

These 278 inmates by the end of the month had successfully passed well over 600 program tests. Each test covered a thirty page programmed booklet. Inmates successfully passing computer generated and scored tests had assimilated thousands of pages of programmed material from several different programs such as Alcohol Education, Drug Education, Parenting, Aids and Co-Dependency? Administrators will be interested to know that over one thousand four hundred hours of inmate time were productively occupied by the different programs tested by this single lab, making the computer assisted program one of the least expensive and most potent inmate management tools available to prison administration. The kicker is that this same lab consisted of ten old 8088 computers costing approximately \$150 each. These were purchased from the university surplus bone yard.

This lab and several others like it have now been functioning for several years and are responsible for literally thousands of inmates receiving services who, under normal circumstances, would most likely not received any kind of treatment or substance abuse education.

- UTILITY AS A SCREENING DEVICE:

The ability of this system to process large segments of the inmate population through tested programs has revealed several ancillary benefits. It was found that inmates completing programs and then being placed into more expensive, lower volume group therapies and therapeutic community settings were not only more motivated and ready for therapy but proved less disruptive, better educated about, and more willing to work on their problems. High volume computer-

assisted programs proved effective in dismantling deep denial systems and educational programming clearly revealed to inmates the damage they had done to themselves and their families. Inmates emerged from such programs with a very clear idea of where they were and what they had become. This gave them a starting point for change. In fact, many inmates after completion of these programs request therapy to help them deal with painful issues brought up. These systems have also proven useful in revealing inmate educational deficits, mental health problems, mentally deficient inmates and inmates under extreme stress. Program tests are constantly measuring an inmate's ability to remember, process information, concentrate and learn.

As the year 2000 approaches, used computer stores along with government and university surplus warehouses are going to fill with older computers that will not be able to handle the date change over.

Prisons will be able to either have these machines transferred to them from other governmental agencies or purchase them very inexpensively and in significant numbers. Although these computers will not be able to handle the complex and memory intensive programs of the 21 century, they will be perfect st for the purposes of providing large scale; computer assisted rehabilitation programs to our prisoners.

After flying down to view these systems in action, the Director of Social Services for one large state prison system reported that there was nothing on the horizon in corrections that could approach what these systems are right now accomplishing. For more detailed information on these programs, you can e-mail marz@azstarnet.com.