

# **Offender rehabilitation and information literacy: A case for providing appropriate prisoner access to contemporary ICT**

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## **Abstract**

Issues relating to access to information and communication technologies (ICT) in the provision of education and training for offenders in Australian corrective facilities are identified from an examination of contemporary and predicted future needs in Australian adult education, including vocational education and training, in relation to the general theme of the role of education in offender rehabilitation. The particular need for the continuing and accelerated development of Australian adults' information literacy is examined in terms of the concept of a learning society, including the interpretation of this concept in current Australian Government policy development. The relevance of issues arising from this examination to the situation of prisoner students is illustrated with reference to information about a sample of such students who have been enrolled in a tertiary preparation program offered in distance education mode. Using the particular situation of these students as an example, limitations to prisoner student participation in career-related education and training are discussed in the contexts of career education and vocational education. The discussion focuses on the current and predicted future use of information technologies in course design and delivery, the current limited access that prisoner students have to these technologies, and suggested ways in which the educational effects of these limitations could be overcome.

## **Introduction**

This paper is presented in four main sections. The first three sections progress from broad to specific perspectives on the topic of relationships between offender rehabilitation and appropriate prisoner access to contemporary ICT.

The final section draws the various perspectives together in suggesting a general, collaborative approach to addressing the issues raised in the preceding sections.

The general linkages between offender rehabilitation, employment-related education and training, and ICT in contemporary Australian society are discussed in the first section of this paper. The second section of the paper outlines a suggested general approach to prisoner education that incorporates the use of contemporary ICT in career planning for social inclusion and in ongoing, lifelong career-related vocational education and training. The general approach suggested is similar in broad concept to holistic approaches that have been advocated in various policy documents relating to prisoner education in Australia.

The third section of the paper examines specific issues in the provision of prisoner access to contemporary ICT for education and training purposes such as career planning and updating employment-related knowledge and skills. In order to highlight immediate practical aspects of these issues, they are examined in the context of the ICT requirements of undergraduate programs at a specific university. In the fourth, concluding section of the paper a general way forward in the provision of appropriate prisoner education and training access to contemporary ICT is suggested, through collaborative effort on the part of correctional facilities and education and training providers. The main body of the paper now begins with a discussion of the general relationships between offender rehabilitation through education and training, and access to contemporary ICT.

### **The general case for access: recidivism or social inclusion?**

Since the early 1980's there have been rapid, profound, and continuing changes in the types of workplace knowledge and skills demanded by Australian industries, and in the means by which people can acquire knowledge and skills. The rapid and continuing nature of the changes in employment-related knowledge and skills necessitates a continual updating of such knowledge and skills by people if they are to remain or become productive members of Australian society. For such people, the ongoing changes in the means by which knowledge and skills can be acquired necessitates a continuing process of learning. The process involves, at least at the initial stages, learning how to learn in contemporary Australian society. Learning how to learn in contemporary Australian society involves learning how to make effective use of modern ICT, as these technologies are now the major means by which up-to date information is available to most people.

The alternative to being a productive member of society is to be at high risk of social exclusion, to become marginalised as a member of a social underclass, and thus to not have the capacity and/or motivation to fully participate lawfully in the benefits and responsibilities of citizenship. The links between social marginalisation and participation in crime have been well established by documented research. The established links clearly imply that motivation and realistic opportunity for individuals to achieve and maintain social inclusion are major elements of a general social strategy for the prevention/reduction of crime including the prevention/reduction of offender recidivism through offender rehabilitation.

To achieve and maintain a productive role in contemporary Australian society, people need to use modern ICT. Inclusion of the use of modern ICT in prisoner education programs, particularly those relating to the future employment prospects of individuals, would appear to be an important element in offender rehabilitation and the consequent reduction of the rate of offender recidivism.

The links between offender rehabilitation, recidivism and the need for prisoners to have appropriate access to contemporary ICT for education/training purposes can be understood in terms of the general concept of 'social inclusion'. Warschauer (2003, p. 8) referred to social inclusion as a person's ability to fully participate in society and to control her/his own destiny. Full participation in society, in the context of Warschauer's (2003) concept of social inclusion, implies socially accepted, lawful participation. Pursuit of a criminal career, although arguably a form of participation in society and a way of controlling one's own destiny, is the antithesis of the concept of social inclusion as the term is used here

Many published reports imply that there is an inverse relationship between recidivism and the education/training achievement of offenders during incarceration. These reports conclude that, where prisoners have developed capacities for achieving social inclusion through education and training programs, the level of recidivism has been reduced (for example, Callan & Gardner, 2005; Eggleston, 2003; Fabelo, 2000; Fortin, 2003; Gehring, 2003;. Kirby et. al., 2000; Steurer et. al, 2001). The Texas Criminal Justice Policy Council reported, in relation to prisoners' educational achievement while incarcerated, that 'higher educational achievement scores are associated with lower recidivism rates' (Fabelo, 2000, p.33). From a study of the relationships between correctional education and recidivism in three North American States in 1997-98, Steurer et. al. (2001, p. 49) concluded that 'Correctional education significantly reduced long-term recidivism for inmates released in late 1997 and early 1998'. Eggleston (2003, p. 2) stated that 'we do have evidence that education makes a difference in prisoners' lives, and in their ability to function in society'. There is Australian and international government policy support for the claim that the provision of appropriate education and training for prisoners is instrumental in reducing the general rate of recidivism. For example, The Standard Guidelines for Corrections in Australia Revised 2004, which are closely related to guidelines adopted by the United Nations and the Council of Europe (Australian Institute of Criminology (AIC,) 2004, p. 3), state that

Prisoners should be provided with access to programs and services, including education and vocational training (including employment), that enable them to develop appropriate skills and abilities to lead law abiding lives when they return to the community (AIC, 2005, p. 24) (original parentheses).

The apparent policy directions of some Australian correctional services authorities, regarding the provision of education and training services for prisoners, acknowledge the importance, for offender rehabilitation, of education/training of prisoners. A statement by the Queensland Government Minister for Police and Corrective Services in 2005 refers to the provision of educational programs that are aimed at the achievement of offender re-integration into the community (Queensland Government, 2005, p. 4).

Gilmour et. al. (2003, p.1) reported that, after 1997, the Western Australian Department of Justice 'greatly expanded the scope of the education and vocational training area of the Western Australian custodial environment'. According to Gilmour et. al. (2003, p. 1), the changes to which they referred stemmed from 'a greater understanding of the effectiveness of education/skills development in reducing re-offending' on the part of the Department. Thompson and Clifford (2003, p. 2) referred to 'new directions of corrections education currently supported by Corrections Victoria' stemming from the adoption of an 'holistic approach to sentence management' as part of the Victorian Corrections Management Plan. The new directions include 'an integrated approach to the provision of prisoner education and training' (Thompson & Clifford, 2003, p. 2), presumably related to the 'training pathways model' reportedly under trial in Victorian correctional facilities in 1995 (Wilson & Penaluna, 1995).

In relation to recidivism and the provision of relevant vocational education and training to prisoners, Robinson (2003) found that the opportunity for an offender to obtain satisfying, legitimate employment after release from custody was an important factor in reducing the probability of recidivism. Robinson stated that 'stable employment on release from custody is one of the key drivers in reducing re-offending' (Robinson, 2003, p. 1). In a report of the British Government's plans for changing the management of offenders, Blunkett (2004) stated that

Very often offenders have missed out on much of their education. This normally means that they have little or no prospect of a job. We have put in place measures to improve offenders' educational attainment and improve their chances of securing work. (Blunkett, 2004, p. 4)

Offenders who are able to identify and choose the type of career in which they want to work, and are assisted to gain the education/training required for employment in that career, are likely to be motivated to achieve satisfying, legitimate employment after release from custody, thus greatly improving their chances of achieving social inclusion. The processes involved in identifying and preparing for employment in an acceptable career are referred to here as 'self-directed career management'. The processes of self-directed career management include career education about setting realistic career goals, vocational education relevant to the goal and learning how to manage a legitimate career through lifelong learning.

For most adults, living a productive, socially acceptable life in contemporary Australian society requires understanding and skill in using modern ICT (Ministerial Council of Education, Employment, and Youth Affairs (MCEETYA), 2005). The link between recidivism and lack of adequate ICT skills and knowledge is basically that, in the contemporary 'information economy' (MCEETYA, 2005), achieving social inclusion without these skills is extremely difficult. Engagement of prisoners in specific educational processes involving the use of modern ICT is necessary if they are to have opportunity to acquire the knowledge and skills a person needs for effective self-directed career management in an 'information society' (Castells, 1996) such as contemporary Australian society (MCEETYA, 2005).

Evidence of a relationship between the provision of vocationally-oriented education for prisoners and reduction in recidivism have been reported from a

variety of studies (for example, Eggleston, 2003; Fabelo, 2000; Fortin, 2003; Gehring, 2003; Kirby et. al., 2000; Robinson, 2003; Steurer et. al., 2001). Robinson (2003, p. 1) concluded that 'Offering the right learning and skills opportunities will improve offenders' chances of getting a job in the future, and of making a positive contribution to society'. She described the vision of the Offenders' Learning and Skills Unit of the Department of Education and Skills as the provision of prisoner access to opportunities for education that equip them with employment-related credentials and the capacities to have a positive role in society on release, comparable to the provision of the access available to members of the general society (Offenders' Learning and Skills Unit, 2005). Realisation of this vision, in the context of a contemporary information society, would require the education and training of prisoners in the uses of contemporary ICT as a major source of relevant employment-related information in a rapidly changing social and economic environment. The need for people to access ICT effectively, in order to enhance their employment prospects, has been identified in numerous publications during the past few years (for example, MCEETYA, 2005; Mossberger et. al., 2003; Warschauer, 2003). Mossberger et. al. (2003, p. 61) concluded that effective access to ICT significantly enhances a person's economic opportunities in various ways, such as enabling the person to make well-informed career decisions and to have access to career-related lifelong learning. Warschauer (2003) claimed that:-

the ability to access, adapt, and create new knowledge using new information and communication technology is critical to social inclusion in today's era. (Warschauer, 2003, p. 9)

The conclusions reached by Mossberger et. al. (2003) and Warschauer (2003) indicate that offenders' motivation and capacity to achieve social inclusion after release from custody would be greatly diminished by their exclusion, during incarceration, from opportunities to learn how to use contemporary ICT for legitimate employment-related purposes. On release, offenders who are excluded from participation in these learning opportunities are very likely to experience the same types of economic disadvantage as the people in the wider society who are on the losing side of the 'digital divide' (Norris, 2001). Claims that a digital divide exists in many contemporary societies, and that it results in the social and economic marginalisation of under-classes in those societies, have been extensively debated in the literature in recent years (for example, Holloway, 2005; Lindsay, 2005; Mossberger et. al., 2003; Norris, 2001; Selwyn, 2005). Mossberger et. al. (2003, p.11) characterised the digital divide as the existence of patterns of unequal access to information technology on the basis of membership of a particular group in society such as low socioeconomic status or geographic location. Warschauer (2003) identified social inclusion/exclusion as the major social issue of the digital divide. The conclusions reached by Warschauer (2003), and by many other writers on the topic of the digital divide, indicate that a lack of provision of appropriate prisoner education involving access to contemporary ICT, at least for legitimate employment-related purposes, would serve to reinforce their social and economic marginalisation. On release from custody, offenders who have been excluded from learning how to use contemporary ICT for legitimate career purposes would be part a marginalised under-class who do not have the

motivation or capacity to achieve social inclusion via the pathway of satisfying, legitimate employment. Offenders who perceive themselves to be in this social and economic situation on release from custody would be prime candidates for recidivism. From the considerations examined here, a reasonable prediction can be made that recidivism by at least some categories of offenders would be reduced by the provision of opportunities for them during incarceration to engage in an educational program which is designed to equip them with the knowledge and skills to develop and manage a desired, legitimate career in contemporary society.

### **Prisoner education for social inclusion: a suggested general approach**

Adoption of an holistic program model of prisoner vocational education was advocated by The Australian Senate Employment, Education and Training References Committee (ASEETRC) in 1996 (ASEETRC, 1996, p.28). ASEETRC (1996) referred to the model as 'the training pathways' model. The general approach suggested in this paper is an holistic program model that appears to be similar, in broad concept, to the training pathways model reported by Wilson and Penaluna (1995). The model was under trial in a correctional facility in Victoria in 1995 (Wilson and Penaluna, 1995). The training pathways model, to which Wilson and Penaluna (1995) referred, represents an holistic approach to the management of education and training provided for prisoners, based on the identified needs of individuals. Development of the training pathways model apparently stemmed from implementation of the National Vocational Education and Training Strategy, which was adopted nationally in Australia in 1995 (Australian National Training Authority (ANTA), 1997; 2001). Implementation of the Strategy apparently began in correctional facilities in Victoria and Queensland in 1995 (ANTA, 1997). The training pathways model may have been incorporated into the holistic approach to sentence management recently adopted in Victoria, as referred to by Thompson and Clifford (2003, p. 2). Identification of the exact nature and origins of approaches taken to prisoner education/training across the various correctional jurisdictions in Australia is difficult because of the lack of specific information in the public domain about relevant policies and practices.

In the context of an information society, such as contemporary Australian society, to be fully effective an education program within the general training model type of approach would have to include appropriate access to, and education and training in the use of, a range of contemporary information and communication technologies. Essential elements of such a program, as identified in an earlier section of this paper, include perceptual-motivational aspects and a wide variety of knowledge and skills relating to self-directed career management involving effective use of ICT. Major content components, relating to these elements, include career planning, vocational education and training relevant to the achievement of desired, realistic career goals, and the development of a capacity for self-directed, career-related lifelong learning. Inclusion of each of these components in an education program would require appropriate prisoner access to particular types of ICT to develop skills in their use and to access essential information. As the elements of such a program are highly interactive with each other, an holistic approach to the design and implementation of the program would be necessary. The career planning

component would enable identification of the education and training needs of individuals, in addition to its role in developing individuals' motivation to undertake education and training while incarcerated. Provision of a comprehensive approach to prisoner vocational education and training in Queensland correctional centres, based on identified needs of particular groups of prisoners, was recommended by Callan & Gardner (2005).

The particular approach to developing and implementing an holistic education/training program that is advocated here differs from the training model approach as described by Wilson and Penaluna (1995), in that it has an emphasis on the development of the individual's motivation and capacity to achieve effective self-directed career management on a lifelong learning basis, and necessarily includes appropriate access to, and training in, the vocational uses of contemporary ICT.

The combination of career education, vocational education, and development of the capacity for lifelong learning has potential to reduce recidivism through two main mechanisms, and to benefit society in two main ways. The two main mechanisms that have potential for reducing recidivism are the development of offenders' internal motivation to achieve social inclusion through gaining personally rewarding legitimate employment, and the development of their capacities to achieve and maintain such employment. Professionally-assisted career planning, involving professionally guided self-assessment and personal goal setting, is a powerful tool for developing an individual's internal motivation to achieve personally- and socially-desired goals (Holland, 1997). The provision of vocational education relevant to personal goal achievement, and of the capacity to acquire relevant skills and credentials through self-directed learning, offers the individual the opportunity to experience a tangible and realistic means by which personally- and socially-desired goals can be achieved. The experience of progress towards personally-desired goals, particularly of self-directed progress, is a powerful influence in maintaining an individual's internal motivation to achieve the goals. The two main potential benefits to society are reduction in recidivism, and gaining self-sustaining, productive citizens.

Career education contributes to the opportunities available to a person to achieve social inclusion in various ways, primarily by establishing the basis of the individual's enduring internal motivation to achieve realistic, socially-approved employment goals. From the viewpoint of an employee or potential employee, work needs to fulfil the criteria of being interesting, of appealing to a sense of accomplishment (earning a living), of satisfying the individual's values associated with work, and of being something the individual feels competent at and enjoys doing. Any one of these criteria can be the most important. For example, doing a rather dull job that is seen as important may satisfy one person; another may find that if they are needed then that will make the job satisfying, and for another if the pay is high enough then whether it is dangerous or distasteful will not matter. Career education initially involves finding matches between the individuals' values and occupational goals, and deciding which aspects of the possible matches are the most important. Once an individual's goals have been chosen, the next step is to explore occupations to find ones that match some or all of the person's work values, abilities and interests (Holland, 1997). These career planning processes require well-

informed clear thinking. In an information society, such as contemporary Australian society, access to up-to-date career-related information available via ICT is essential to a person's effective career management, including career planning.

Vocational education, as distinct from career education, is concerned with specific education and training that enhances a person's opportunities for actually obtaining employment in a particular occupation or range of occupations. Whereas career education focuses on the needs and preferences of the potential or actual employee, vocational education focuses on the needs of the employer. Vocational education for a particular occupation is based on identification of the nature and degree of skill required, the amount of effort demanded and the extent of individual responsibility for decisions affecting the resources or personnel of the organisation (Zimbardo, 1996) Logically and ideally, a person's vocational education choices follow from the person's career decision-making, so that vocational education is aligned with personally-desired, realistic career goals. Vocational education contributes to a person's opportunities to achieve social inclusion to the extent that it provides a pathway by which the person can obtain the socially-approved type of employment that the person desires to have and which enables the person to share in the economic and social benefits that ensue from such employment. In contemporary Western 'knowledge societies', in the current 'age of learning' (Jarvis, 2001), vocational education is necessarily a lifelong process for people who want to remain employed in highly skilled occupations and/or to advance to higher levels of employment.

The relevance of lifelong learning to the individual's career management and vocational education throughout the individual's employable lifetime, and to society, was emphasised in the MCEETYA *Joint Statement on Education and Training in the Information Economy*, in the following words:

A workforce with access to individualised and flexible quality training through new technologies will address Australia's need for competent workers who learn throughout life (MCEETYA, 2005).

Kearns (2004, p. 9) noted that

Australian jurisdictions are progressing towards . . . a national commitment to build Australia as an inclusive learning society (Kearns, 2004, p. 9)

The relationship between an individual's capacity and motivation for lifelong learning and the individual's opportunity to achieve and maintain social inclusion is illustrated by the relationship between lifelong learning and inclusion in 'the learning society' (Kearns, 2004; 2005; Edwards, 1997, p.184; Scollay, 2000, p.12). The general concept of the learning society is encapsulated in Jarvis' (2001, p. 37) description of contemporary Western societies as 'knowledge societies' in 'the age of learning'. Kearns (2004) described a learning society as one where learning is valued and expressed in a myriad of forms and contexts. In such a society learning is intrinsic to social, cultural, civic and economic activity. A knowledge society is by its nature a learning society where innovation is continuous and embedded in the culture. (Kearns, 2004, p. 23)

According to Edwards (1997), one interpretation of a learning society is a society in which a learning approach to life is valued and practised, and in which people draw on a wide range of resources to enable them to support their lifestyle practices. Alternatively, the learning society can be interpreted as a 'learning market' of opportunities that are available to individuals to update their skills and competencies in an economically competitive market (Edwards, 1997, P. 184). This interpretation is consistent with the particular emphasis placed by MCEETYA (2005) on the importance of individuals' lifelong learning in the development and maintenance of an Australian workforce whose skills remain relevant in 'a world of continuous technological change where knowledge is becoming a commodity' (MCEETYA, 2005). MCEETYA (2005) referred to the capacity of contemporary ICT to enable the delivery of education and training that matches individuals' interests, potentials and life stages. MCEETYA advocated the 'intelligent use of information and communications technology' to ensure that 'all learners have the necessary knowledge and skills for work and life in the twenty-first century' (MCEETYA, 2005).

In order to achieve and maintain social inclusion in a learning society, according to either of the two interpretations presented here, people need to be engaged in lifelong learning (Kearns, 2004, p. 17). Lifelong learning is a general means by which people can ensure that their career management, in particular their ongoing vocational education, supports their continuing social inclusion. In order to engage in lifelong learning, people need to have adequate motivation and capacity for ongoing learning throughout their lives. Motivation for engaging in ongoing vocational education stems from effective career management, in which individuals set personally-desired, realistic career goals, develop realistic plans for achieving their goals (including updating/upgrading their employment-related skills and credentials, as necessary), monitor their progress towards achieving their goals, and make informed decisions regarding changes to their goals and plans. In a contemporary information society, people's capacity for ongoing learning depends heavily on their ability to effectively access contemporary ICT (Kearns, 2004, p. 17; Edwards, 1997, p. 56). In discussing scenarios for the development of a learning society in Australia, Kearns (2004, p. 17) referred to 'the growing significance of information and communication technology (ICT) in extending learning opportunity for all throughout life'.

Effective use of each of the three main processes by which people can achieve and maintain their social inclusion in contemporary Australian society, as outlined here, viz., career education, vocational education, and lifelong learning, requires effective individual access to contemporary ICT.

Mossberger et. al. (2003, p. 39) identified two types of skills that people need in order to have effective access to contemporary ICT, viz., skills of technical competence, and skills of information literacy. The term 'technical competence' as used here refers to the skills needed to operate the hardware and software of ICT, including the skills of using networked computer systems to access and share information. Collectively, these skills have been referred to as 'computer literacy' (for example, Warschauer, 2003, p. 47). The concept of literacy in relation to accessing ICT was discussed by Warschauer (2003, p.47), who pointed out that people need to have developed a range of literacies that enable them to use the various physical, digital and human resources involved in ICT.

By way of an example of such literacies, he referred to computer literacy as the literacy that enables a person to decide how to use a computer to access particular kinds of information from Internet sources (Warschauer, 2003, p.47). Breivik (1992b) and Mossberger et. al. (2003) drew attention to another type of literacy, viz., information literacy, that people need to acquire in order to be able to access contemporary ICT effectively. Information literacy has been described in general terms by Breivik (1992a, p.10) as the ability to locate, evaluate and use information. Breivik (1992a, pp.11-12) argued that information literacy is a necessary condition for resource-based learning, an approach to learning that she regarded as essential for people adopt in order to be able to cope with the demands of a changing social and economic environment. In such an environment, she argued, learning that results only in the acquisition of a knowledge base is inadequate because people also need to learn how to locate and explore new information from the range of information resources, including those available via the Internet, and to connect this new information, in practical, useful ways, with other information (Breivik, 1992b). The economic imperative of developing an information literate Australian population has been identified by the House of Representatives Standing Committee for Long Term Strategies (1991-92, Vol. 1, p. 26; Vol. 2, p.8). Mosberger et. al. (2003) defined the type of information literacy to which they referred in the context of a person's ability to effectively access ICT as

the ability to recognise when information can solve a problem or fill a need and to effectively employ information resources (Mosberger et. al., 2003, p. 39)

The nature of the learning processes that are involved in the development of people's information literacy, so that they can access ICT effectively, has definite implications for the design of education programs that are intended to facilitate such development. According to Wilhelm (2004), this facilitation requires 'a transformation in the way we educate people . . . as our social institutions migrate into cyberspace'. The types of learning processes that are involved are those to which Breivik (1992a, 1992b) and Pence (1992, p. 121) referred generally as 'resource-based learning'. Resource-based learning as a means to effective self-determined career management in an information society requires access to information that is available only through the use of contemporary ICT. In the context of the importance to contemporary Australian society for individuals to engage in lifelong learning, MCEETYA (2005) advocated the integration of 'information and communications technology into all facets of education and training'. As Pence (1992, p. 121) pointed out, resource-based learning also requires a supporting learning community of educators and administrators to create an environment in which learners can develop information literacy. Implementation of an holistic, resource-based learning program, of the type advocated here for prisoners, would require allocation of considerable human and physical resources. Probably, correctional facility authorities would require that resources allocated for the implementation of a new program be used in ways that were demonstrably likely to achieve maximum benefits for the individuals involved and for the wider society. Achievement of maximum beneficial effects from the type of program

suggested here would require careful selection of the target groups of prisoners to whom the program was made available.

Fortin (2003, p. 5) concluded that prisoners who benefited most from educational programs during incarceration were those with long sentences, one category of repeat offenders violent offenders, and younger offenders. The Texas Criminal Justice Policy Council concluded that

The most significant reductions in recidivism are associated with increasing educational achievement scores for high risk offenders (young property offenders) (Fabelo, 2000, p. 33) [original parentheses].

Prisoners who could benefit themselves and society by preparing themselves to achieve social inclusion on release would appear most particularly to be those who have a personal history of long periods of unemployment in the legitimate economy, those who lack current employment-related credentials and skills, and those who want to redirect their lives through career change. A high incidence of (pre-incarceration) low levels of legitimate employment and of employment-related credentials and skills of prisoners in Australian correctional facilities, compared with the levels for the general Australian population, has been documented (for example, Australian Bureau of Statistics, 2001a; 2001b; Walker et al., 1991). The relatively high incidence indicates that a significant proportion of these prisoners have not had a prolonged experience of social inclusion based on achievement of personally satisfying, legitimate employment. Such prisoners are unlikely (at the time of incarceration) to have the motivation, knowledge or skills needed to achieve social inclusion through legitimate, ongoing employment after their release from custody. For individuals who have a life history of unemployment or of unsatisfying employment, career education involving informed, realistic, self-directed career planning provides a basis for the development of internal motivation to achieve socially acceptable goals by becoming a productive member of society.

In addition to prisoners with pre-incarceration life histories of unemployment and low levels of employment-related skills/credentials, there is at least one other group of prisoners who need access to resource-based learning via appropriate access to ICT in order to achieve/re-achieve social inclusion on release from custody. This second group is comprised of prisoners who have a life history of pre-incarceration legitimate employment and who have a commitment to redirect their lives through career change or career upgrade. In many cases these prisoners have realistic aspirations to undertake higher education undergraduate programs by distance education. There are distance education programs, such as the Tertiary Preparation Program (TPP) offered by The University of Southern Queensland, by which prisoners in Australian correctional facilities can gain eligibility for entry into higher education undergraduate programs. The TPP currently requires very minimal student access to ICT, however most higher education undergraduate programs have relatively high ICT access requirements. At the present time, however, most prisoners in Australian correctional facilities do not have effective access to the range of modern ICT that is required in order to successfully undertake undergraduate studies at a university. Prisoners aspiring to undertake higher education undergraduate programs are doubly disadvantaged with regard to their educational opportunities, and, consequentially, with regard to their

opportunities for achieving social inclusion after release. The double disadvantage that they experience is that they cannot effectively access the information that is required for successful study at the undergraduate level and they have no opportunity to learn how to use contemporary ICT as a major learning resource in their career management or in study at a higher education level.

### **The importance of ICT access for prisoner education: an illustrative case**

The disadvantages experienced by prisoners who want to undertake university undergraduate study are illustrated by the situation of a sample of prisoners who enrolled in the TPP. The TPP is offered by primarily print-based distance education, and has very low ICT access requirements. With the exception of one entirely optional course, TPP students are not required to source any information from the Internet or to demonstrate any ICT-related skills. The situation for prisoners who completed the TPP, regarding ICT access and use requirements, changed dramatically when they wanted to undertake studies in an undergraduate program. Currently there is only one USQ undergraduate program which a student could successfully complete without access to information sourced from the Internet and without developing skills in using ICT to obtain and process information. The situation described here is similar for most prisoners who want to undertake undergraduate programs in other Australian universities, and, within the foreseeable future, will also be the case for prisoners who want to undertake studies in TAFE advanced programs.

In investigating the situation that is described here by way of an illustrative example, anonymous career-related information was extracted from a random selection of records of 102 of the 283 TPP students in prisons in the period from semester 1, 2003 to semester 1, 2005 inclusive. This information was available from a career planning assignment that all TPP students are required to submit as part of the assessment of students' work in one of the TPP core courses. The information was extracted and interpreted by a qualified career counsellor who teaches the career management component of the core course. The information was extracted from the students' responses to the Holland Self Directed Search (SDS) (Holland, 1994). Analysis of the information showed that 75% of the career choices of the sample of prisoner students were confirmed by the career counsellor to be at least a reasonable match between the students' expressed occupational choices and the careers indicated by analysis of their SDS responses. Of the 102 prisoner students in the sample, 56 students' choices were completely matched by their SDS codes, 35 had two of the three SDS code letters that matched their chosen occupation/study program and the rest had one type that matched their occupational interest. The occupations selected by the students in the sample were as follows:

Journalism/Writing/Law; Environmental Science (chosen by 30 of the sample of 102 prisoner students)

Business (25)

Psychology/Social or Welfare Work (20)

Engineering/Surveying/Science (10)

Computing (6)

## Sports Coaching/ PE Teaching/Refuge Work (5)

For the vast majority of the occupations selected by the sample of prisoner students, a person would need to have a higher education qualification in order to have any chance of gaining employment as a mature adult. On completing the TPP these students were eligible for direct entry to a USQ undergraduate program. However the ICT access requirements of these programs greatly restricted the students' possible choices of program. The only USQ undergraduate program that currently does not require access to information sourced from the Internet, and/or skills in using contemporary ICT to obtain and process information of various types, is a Bachelor of Arts program. This program does not provide the credentials required for employment in most of the occupations chosen by the sample of prisoner students.

In the situation that has been described here, offenders who have demonstrated a commitment to achieve social inclusion after their release from custody, and thereby to become productive members of society, are currently effectively blocked from using their time in prison to undertake studies that are necessary to their achievement. The blockage results from a combination of two circumstances, viz., the recent adoption by USQ of contemporary ICT as a major teaching-learning resource, and the lack of access by prisoners to the relevant ICT. Implementation of some parts of the Queensland Department of Corrective Services *Communication and Technology Strategic Plan 2003-2007* may enable at least some of the prisoners in the type of situation that has been described here to progress with university undergraduate studies related to their desired career goals. The part of the *Plan* that is relevant to the alleviation of the situation described here is the strategy statement 'provide appropriate offender access to information technologies and ICT training' (Department of Corrective Services, 2005, p. 15) in relation to the identified issue of 'providing appropriate offender access to computer facilities' (Department of Corrective Services, 2005, p. 9). Given that providing ICT access to prisoners is very likely to be perceived by correctional authorities to involve significant security risks and additional resource allocations, a reasonable prediction can be made that the authorities would require a practical evaluation of the risks that would be involved and of the resource allocations that would be needed before agreeing to the provision of such access. A practical evaluation could be undertaken by conducting a staged series of trial projects, beginning with a predicted relatively low risk groups who required relatively low additional resource requirements for specific types of ICT access.

Two general groups of prisoners have been identified here as suggested main target groups for whom appropriate educational access to contemporary ICT should be considered. The larger of these groups is comprised of prisoners whose motivation and capacity to achieve social inclusion by way of gaining desired, legitimate employment after release from custody could be developed through an appropriate educational program. This group consists of prisoners who are characterised by having medium- to- long custodial sentences, a personal history of prolonged unemployment, and low levels of the types of skills that are needed to gain legitimate, meaningful employment in contemporary society. The other, smaller group is comprised of prisoners who already have demonstrated that they have a commitment to achieve social

inclusion through obtaining legitimate employment after release. This group includes prisoners who have completed preparatory studies in order to become eligible for entry into a higher education program, or who are otherwise eligible for entry into an undergraduate program and who have expressed a desire to obtain an employment-related higher education qualification. Prisoners in this group appear to be the logical choice with whom to trial projects to test and evaluate the feasibility of providing prisoners with appropriate ICT access. Decisions about the ICT access provided to selected members of this group on a trial basis would need to take into account the types and extent of ICT access the prisoners would need in order to choose a higher education program relevant to achievement of their desired, realistic career goals, and to be able to successfully participate in the program, in addition to the security and resource issues involved. The types and extent of ICT access such prisoners may need will now be illustrated here through reference to the current ICT requirements of university undergraduate programs, in particular USQ programs.

One of the immediate challenges for students considering enrolling in university studies lies in accessing the various levels of information and services necessary for decision-making, such as:

What courses are available, what are the entry requirements, what resources are needed, and where is support available?

The University of Southern Queensland, along with most other Australian universities, provides the above information on its website, and encourages students to enrol, communicate, study, and locate many resources, online. Courses are offered in three main modes, viz., online, on campus, and off campus, however increasingly in recent years a blurring of delivery modes has occurred. For example, day students may have access to multimedia resources prepared initially for distance (off campus) students, and off campus students may join with on campus and/or online students in online discussions. USQ publishes student computing standards on its web site <<http://www.usq.edu.au/its/students/standards/default.htm>>, outlining its general requirements for hardware and software and advising students to check specific Faculty advice as to further requirements for particular programs or courses. Applications of some of the various USQ policies and requirements regarding undergraduate student access to ICT are now illustrated with reference to the undergraduate programs chosen by a sample of TPP prisoner graduates. For the most favoured occupational areas nominated by TPP students in the case study cited earlier in this paper, viz. journalism, business, and psychology/social or welfare work, access to a computer with an internet connection is a definite requirement (The University of Southern Queensland, 2005a. Further evidence of the increasing emphasis on computer literacy and associated communication skills appears in the proposed graduate qualities, specifically in the 'literacies and contexts cluster' which includes the categories of 'information literacy,' 'cultural literacy', and 'information technology literacy'. These desired qualities of USQ graduates are consistent with those of most contemporary higher education providers, and with graduate qualities identified in Australian Government policy documents (for example, MCEETYA, 2005), and are consistent with the USQ's general computer access guidelines.(The University of Southern Queensland, , 2005b) '

The ICT-related requirements referred to here are driven partly by Australian Government policy, partly by rapid technological change, and partly by perceived opportunities for enhancing learning and teaching through ICT. In addition to the forces of government policy and technological change, there is increasing awareness of the potential for using computer-based learning to accommodate different learning styles and preferences through increased interactivity, integrated audiovisual material, synchronous and asynchronous discussion, together with 'intelligent' screen design and navigation choices.

For an institution such as USQ, with significant numbers of mature-age students as well as school-leavers, studying in multiple modes, there are significant challenges in accommodating diverse student expectations, whether based on culture, race, gender, learning styles and preferences, or generational differences. Peters (2005), however, observes that the desire to choose how, when and where they learn is common to all generations. Further, Peters identifies three focus areas in technological developments, viz., mobile learning, multi-authoring via the Web (for example, weblogs), and MP3 and audio devices, each with potential for greater flexibility and interaction for users, as well as opportunities for greater choice and self-determination. Hase and Kenyon (2000) suggest that heutagogy, which is an approach based on 'truly self-determined learning', is appropriate for a future where 'knowing how to learn', as distinct from being told what to learn, will be a fundamental skill. For USQ students there is increased expectation that students will be self-directed, particularly in managing many of their information needs, study processes, and support and administration needs online, and in choosing from a range of study modes to suit their circumstances.

A matrix indicating the relationship between the main stages a USQ student might progress through and information available to students from the USQ Web site, is shown in Table 1, below. The stages range through initial decisions about how and what to study to obtaining information about graduation. The column on the far left of Table 1 shows the following four key stages: seeking preliminary information to help with decision-making; enrolment; study activity; graduation. These are iterative stages. The 'Other' category could include activities such as ongoing access to resources or information not password-protected, for example certain library resources, study advice, and links to professional bodies of interest to graduates.

The remaining columns in Table 1 represent the various resources, academic and administrative, students need to complete their chosen program and comply with university regulations. While many off campus (external) courses are still provided primarily in print form, all courses have an associated online (WebCT-based) study desk where students are expected to manage their administrative tasks, maintain personal details, access email, post queries, and participate in online course discussions as directed. Online courses generally have all course materials linked from the online study desk, and increasingly, on campus and off campus courses also include online materials or Web links to further reference material. This trend is also reflected in the increased number of Library resources in electronic form, and a heightened focus on information literacy.

Table 1: Decision-making stages and information available from the USQ Web site

Phase/ Purpose	USQ informati on	Communicati on	Course s: Conten t etc	Other Resourc es	Administrati on
Prelimina ry Informati on	X	X			X
Enrolmen t	X	X		X	X
Study	X	X	X	X	X
Graduati on	X	X	X	X	X
Other					

USQConnect is the gateway to USQ's electronic systems by which a student can access online study materials, online enrolment, the student's personal details, and USQ-based email accounts which are often used to convey urgent information to students. From USQConnect students have access to the following resource sites:

- USQStudyDesk – to access online discussion groups, illustrated lectures or tutorials, extra resources, course-related email, and past examination papers
- USQAdmin – to change their passwords, create a USQ email address, view personal information and enrolment details, drop/add courses, change contact details; check assignment marks, exam timetables and final grades.
- USQAssist – to ask questions and seek answers to commonly asked questions. A web self-serve facility offering access 24 hours a day, seven days a week.
- Additional tutorials or support materials.

Recent feedback from USQ students in a 2004 review of ICT services and usage indicated that students placed a high value on these resources. Of the 600 responses received from students, 94% said they used USQConnect; 62% used the Student Help Desk; 92% used USQAdmin; 57% used USQAssist; 93% used the WebCT study materials; and 81% used WebCT discussion groups. 95% had internet access at home and more than 90% rated their IT skill level as medium to high. (Academic Usage Working Group, 2004, p.2).

In addition to the online web-based resources, USQ students may also have access to support or explanatory materials on CD-ROM or DVD. In many cases, alternative access to study-related resources is provided, such as printable files print material available on request by telephone or email or by direct contact in person depending on the student's location and ease of access.

For some students the increased integration of services and access to more information online has been a welcome change, allowing access to information 24 hours a day and seven days a week. For those without ready access to the Internet, or even open access to telephone communication, however, assistance from 'proxy' intermediaries such as family or friends, or education officers in correctional centres, is often of vital importance to their progress with

study. Access to online resources by 'proxy' may encounter problems of privacy or security when the required access is password-protected.

The general scope of access and related support that students may need to successfully undertake university undergraduate study by online study mode was identified by Phillips (2003, p.170). He listed the following types of online information support that students may need, in addition to having access to the learning materials provided online by the university:

- Careers guidance for accurately linking study planning to career planning
- Information and guidance about admission prior to enrolment
- Guidance about choice of courses, including prerequisites
- Information about the information and information technology requirements of specific courses
- Advice and support for learning how to effectively engage in study by distance education
- Opportunity to monitor and review progress with study
- Opportunity to obtain academic counselling on progress with study

Access to all of the information listed by Phillips (2003), and to relevant online learning materials, could be made available to USQ prisoner students without providing them with any direct access to the Internet. In some instances resources could be provided on CD or as printouts, subject to the access available to the relevant prisoner students and to the cost of providing multiple copies of such documents. For example, the USQ Handbook, course information and course materials for a particular semester could be made available on CD. In some cases, USQ prisoner students currently are provided with printouts of online class discussions as learning resources, however there may be issues of privacy and security to be resolved before this practice was widely adopted. Very likely there would be issues relating to increased workloads for education officers and other education staff, and issues relating to the development by prisoner students of the knowledge and skills they would need in order to use the ICT in the ways required in the courses.

Another possibility for providing USQ prisoner students with access to the information they need in order to progress their studies is that arrangements could be made with USQ to enable the information to be downloaded from the USQ Web site by authorised correctional facility officers. The downloaded files could be placed on a master computer that was not connected to the Internet, and which was under the control of an authorised officer and physically isolated from the students. The master computer could be networked with other computers in such a way that they could only act as dumb terminals. The dumb terminals could be accessed by relevant students to enable them to obtain the information they needed for their particular studies. At the time of downloading from the USQ Web site, an image of the files could be taken so that the contents of the master computer hard drive could be trashed and replaced with the original image, if required. This would ensure that, in the extremely unlikely event that a prisoner was able to add material to, or damage files on, the master computer hard drive via one of the dumb terminals, no inappropriate material would remain available from the master computer, and any damaged files on the master computer hard drive would be replaced. Additional control over individual prisoner use of the networked computer system could be achieved by

installing software in the master computer to detect and record any attempt at unauthorised use of the system, particularly if access to the master computer via a dumb terminal was individually password protected. In any case, no external security risk would be involved as none of the computers would have any connection to any external sources such as the Internet. Training would need to be provided to staff, and to students who did not already have the necessary computing skills to access the information from the dumb terminal. Trial projects involving access by higher education students to specific types of information downloaded from selected higher education institution websites could be used to identify any security issues that arose, and to identify the various types and extent of additional resources, such as staff time, that were needed in order to provide the access. Assuming that all identified security and resource issues were resolved, prisoner access to the ICT involved in the trial projects could be expanded to include other groups of prisoners. Achievement of the goal of appropriate, adequate prisoner access to ICT for education/training purposes would greatly increase a correctional facility's capacity to provide the range of education and training program needed to facilitate prisoners' development of the employment-related skills, and of the technical and information literacy skills required for self-directed, resource-based lifelong learning, that, in combination, would significantly enhance the prospects of their rehabilitation and achievement of social inclusion after release from custody.

### **Conclusion: Working together as a way forward**

Corrective services educators and researchers in Australia, England and North America have provided evidence and informed opinion supporting a conclusion that the provision of education and training to prisoners is an important factor in reducing offender recidivism. Development of prisoners' motivation and capacities to find personally rewarding, ongoing, socially-acceptable employment after release from custody is a major linkage between prisoner education and training and reduction in recidivism. An understanding of this linkage has been demonstrated by the advocacy by corrective services educators of the adoption of an holistic, comprehensive approach to prisoner education, based on the identified needs of individuals. Major elements of such an approach would include the development of prisoners' motivation and capacities to engage in their career management, in order to identify and take personal ownership of their personal needs for education and training, in relevant employment-related education and training, and in ongoing, lifelong learning to maintain a personally satisfying career.

In the context of the dynamic contemporary and predicted future Australian economic and social environments, in order to be optimally effective in reducing offender recidivism any comprehensive approach to prisoner education and training would require the provision of appropriate prisoner access to modern ICT. The overwhelming weight of evidence and informed opinion in reports to governments and in scholarly analyses regarding current and predicted Australian labour-force knowledge and skills requirements is that the labour-force requirements of most industries can only be met by people who have the capacity to effectively access and use modern ICT in ongoing, lifelong

employment-related education and training. The dynamic nature of the Australian economy results in a constantly changing set of labour-force requirements by industries, such that the maintenance of a person's employment career requires ongoing, lifelong employment-related education and training. Increasingly, providers of education and training services in the higher education and VET sectors are using modern ICT in the design and delivery of their programs. A scenario in which a person is incarcerated for more than two years, without opportunity to acquire or maintain education and training credentials relevant to gaining meaningful, legitimate employment on release from custody, would appear to be a recipe for recidivism, especially for offenders who began their incarceration with a low level of employment-related human capital. Appropriate types and levels of access to modern ICT for employment-related education and training purposes would be an essential component of the provision of opportunity for a prisoner to acquire the human capital necessary to have any prospect of gaining meaningful, legitimate employment after release from custody.

A range of issues involved in the provision of appropriate prisoner access to contemporary ICT for education/training purposes has been discussed here in the specific context of USQ undergraduate programs. The particular context was chosen to illustrate specific practical considerations that are likely to be involved, as Australian universities generally, and USQ particularly, are relatively advanced in the educational use of ICT, compared to many other education/training providers. The choice of a specific context may give an impression that the issues are relevant only to the relatively small proportion of the prisoner population who are eligible for entry to, and who want to undertake, a university undergraduate program. Many of the issues in the provision of appropriate prisoner access to ICT for education/training that have been identified and illustrated in the university context here, however, already apply or will soon apply to the provision of a wide range of vocational education and training programs in correctional facilities.

In addition to the rapidly increasing use of ICT in the delivery of a wide range of education/training programs by providers, implementation of the policy directions of corrective services authorities in Australia for the adoption of holistic, individualised approaches to the management of prisoner education and training would require prisoner access to ICT for the purposes of career management and the development of prisoners' capacities to engage in effective, ongoing, self-directed lifelong learning as a means to achieving and maintaining social inclusion. As the discussion of specific issues in this paper demonstrates, provision of appropriate prisoner access to ICT for education/training purposes involves a variety of potential problems relating to resources and security. Very likely, neither individual corrective services facilities nor educational institutions alone could solve all of these problems, as, generally, each type of organisation has expertise in only certain aspects of them. If the parties were to pool their expertise in a collaborative effort, however, there is a high probability that the pooled expertise would be adequate for generating workable solutions to the problems.

Development of collaborative arrangements between corrective services facilities and education/training providers would require senior management

support from both organisations, as policy and resource issues would necessarily be involved. Where a conservative approach to management is deemed necessary, as is probably the case with corrective services facilities, collaborative arrangements initially on a relatively small, time- and resource-limited basis may be more acceptable to senior management than more ambitious collaborative projects. Initial collaborative arrangements might, perhaps, be concerned with the implementation of trial projects of the type suggested in an earlier section of this paper. If initiatives for collaborative arrangements between corrective services and education/training providers were not driven by senior management implementation of policy, proposals for collaborative arrangements would have to originate at the operations level. As the greatest professional educator stakeholder interests in the education and training of prisoners are held by education personnel in corrective services and in education/training provider organisations, it would be professionally appropriate for collaborative initiatives to progress the provision of appropriate prisoner access to ICT for education/training purposes to originate at the education personnel level.

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