

CSC Education Programs and Services Evaluation

SIGNATURES

EVALUATION OF CSC'S EDUCATION PROGRAMS AND SERVICES

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EXECUTIVE SUMMARY

Approximately three quarters of federally sentenced offenders present a need for educational programming. Offenders' educational needs are assessed upon admission and if an offender has an education level less than grade 12 (or equivalent), education is identified as a need and included on their individualized Correctional Plan. In most CSC regions, offenders with an education need are referred to Adult Basic Education (ABE) programming and receive a high school diploma once they have completed the required ABE courses and program levels that satisfy the provincial diploma requirements. In addition, one region currently offers the General Education Development (GED) program which allows the offender to obtain a high school equivalency.

CSC's Education Programs are intended to address offenders' educational needs; increase offenders' basic literacy, social cognition, and problem solving skills; prepare offenders for participation in correctional programs; and, provide them with the knowledge and skills necessary to gain and maintain employment and lawfully reside in the community upon their release (Correctional Service Canada Review Panel, 2007; Nafekh, Allegri, Fabisiak, Batten, Stys, Li, et al, 2009; Sharpe & Curwen, 2012). Overall, the current evaluation found that educational programming had a positive impact on public safety outcomes, particularly for high and medium risk offenders who upgraded their education by more than 10 educational achievements.

In accordance with the 2009 Treasury Board *Policy on Evaluation*, this evaluation examined issues pertaining to the relevance and performance (effectiveness, efficiency and economy) of CSC's offender education programs and services. The findings and recommendations of the evaluation are presented under six key components: 1) Relevancy; 2) Effectiveness: Education Program Outcomes; 3) Cost-Effectiveness; 4) Efficiency: Optimizing the Delivery of Education Programs; 5) Institutional Libraries and Computer Resources; and, 6) Reporting of Education Data in OMS.

Component 1: Relevancy

Education falls under the jurisdiction of each province (*Constitution Act*, 1867); however, "the federal government is responsible for the education of ... inmates in federal correctional facilities" (Council of Ministers of Education, Canada, unknown). As such, CSC's Education Programs are offered in all federal institutions to increase the literacy levels of offenders and support the safe transition of eligible offenders into the community.

Educational programming addresses the federal government's priority concerning education, literacy and economy. It also supports CSC's strategic priority to enhance public safety by facilitating the safe transition of eligible offenders into the community.

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¹ Under the CCRA, CSC is mandated and responsible for "assisting the rehabilitation of offenders and their reintegration into the community as law-abiding citizens through the provision of programs in the penitentiaries and in the community".

Furthermore, there is a demonstrable need for educational programming in Canadian federal institutions as approximately 75% of offenders admitted to federal custody reported that they did not have a high school diploma (or equivalent).²

Component 2 - Effectiveness: Education Program Outcomes

Offender participation in educational programming was found to have a positive impact on employment outcomes for medium and high risk offenders particularly for those who completed more than 10 educational achievements. Similarly, offenders who participated in educational programming had lower rates of conditional release failure compared to non-participants and these results were better for medium and high risk offenders who completed more than 10 educational achievements. The positive impacts of education program and nationally recognized correctional program participation were found to be independent of each other as statistical analyses revealed no significant interaction between the programs.

Component 3 - Cost-effectiveness

Addressing offenders' educational needs decreases the rate of conditional release failure which reduces reincarceration costs. As such, the current evaluation found that CSC provides education programming in a cost-effective manner given that education program participants typically recidivate at lower rates than non-participants. As well, the direct costs associated with the participant group (educational program costs plus potential re-incarceration costs) are less than those associated with the non-participant group (potential re-incarceration costs). It was also noted that opportunities exist for CSC to optimize the delivery of education programs which could enhance positive post-release outcomes for more offenders, thus enhancing overall cost-effectiveness.

Component 4 - Efficiency: Optimizing the Delivery of Education Programs

In order to optimize the impact of education on post-release outcomes, the evaluation recommended that CSC should target higher risk offenders, and encourage regular and ongoing positive interactions in an environment that facilitates the development of cognitive as well as non-cognitive/social skills. The evaluation also recommended that CSC increase offender literacy levels from elementary to high school levels of education, and identify and accommodate the needs of offenders with learning disabilities. A Management Action Plan (MAP) addressing these issues was developed to ensure that the appropriate offenders are prioritized for educational programming, the appropriate delivery model is applied in each region, and there is clear direction on how learning disabilities will be assessed and accommodated.

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² This group consisted of offenders who were on their first sentence and had an Offender Intake Assessment (OIA) between April 1, 2008 and March 31, 2013. Offenders with low risk and low need had a compressed OIA assessment and did not complete intake questions related to education. Therefore they were included in the sample but excluded from this analysis examining level of offender need at intake.

Component 5 - Institutional Libraries and Computer Resources

The current evaluation found that the quality and quantity of library resources could be enhanced by providing reading materials that assist in addressing the education needs of offenders. In addition, more up-to-date and relevant material could be available to offenders in order to assist them in increasing their literacy level and provide opportunities for obtaining employment and successfully reintegrating them into the community. As such, the evaluation recommended that CSC ensure that the educational information needs of offenders are met through access to relevant and up-to-date reading material which supplements CSC's education program and prepares offenders for their release to the community. The MAP addressing these issues ensures that materials required in institutional libraries to support offenders in their education program are identified, best practices for tracking library materials are assessed, and additional opportunities to educate offenders in the full use of library resources are recognized.

The current evaluation found that software applications and functions available to offenders were limited, outdated, and did not meet labor market standards. It was also noted that increasing the use of computers and technology within CSC's education programs would supplement the curriculum and provide opportunities for offenders to enhance their computer and employability skills in preparation for release. As such, the evaluation recommended that CSC should consider supplementing educational program material with electronic resources to capitalize on the benefits of computer-assisted learning which will provide opportunities for offenders to gain computer skills needed for increasing literacy levels. The MAP addressing these issues examines the software and electronic resources currently used in CSC's institutions and examines best practices in this area to support offender education programs.

Component 6: Reporting of Education Data in OMS

Data limitations make it difficult to report education program outcomes for offenders in a timely and accurate manner, despite improvements to infrastructure and the development of a national guide for entering educational data into OMS. As such, the evaluation recommended that CSC enhance the timeliness and consistency of educational data reporting and ensure that the national guide is followed when entering educational data into OMS. In addition, it was recommended that CSC clarify the roles and responsibilities for the assessment of learning disabilities to meet the educational needs of offenders. The MAP addressing these issues ensures that procedures for data entry are followed, and that there is appropriate monitoring and reporting on the timeliness and accuracy of data entry.

LIST OF KEY FINDINGS

FINDING 1: RESPONSIBILITY FOR DELIVERING EDUCATION PROGRAMS

The education of inmates in federal correctional facilities is the responsibility of the federal government and CSC has a role and responsibility to deliver programming that contributes to offender rehabilitation including educational programming.

FINDING 2: NEED FOR EDUCATIONAL PROGRAMMING

There is a demonstrable need for educational programming in Canadian federal institutions.

FINDING 3: EDUCATION PROGRAM OUTCOMES

Offender participation in educational programming had an overall positive impact on public safety outcomes, particularly for high risk offenders who upgraded their education by more than 10 educational achievements.

FINDING 4: TYPE OF EDUCATION PROGRAM

When comparing high risk, non-Aboriginal offenders who completed GED to those who completed ABE IV, no significant differences were found for revocations with a new offence and employment outcomes. In addition, GED credentials were reported to be less valued in the community than a high school diploma. GED is also no longer recognized by the Ministry of Education in some provinces.

FINDING 5: COST-EFFECTIVENESS OF OFFENDER EDUCATION

Addressing offenders' educational needs contributes to successful public safety outcomes. Using a rigorous approach to analyze the direct costs associated with education program delivery and correctional outcomes, the evaluation suggests that CSC's education programs are cost-effective.

FINDING 6: OPTIMIZING DELIVERY

Focusing on higher risk offenders with education needs and raising their education levels through the delivery of Adult Basic Education programming optimizes positive post-release outcomes and overall cost-effectiveness.

FINDING 7: INSTITUTIONAL LIBRARIES

CSC's institutional libraries support offenders in their education program, however; the quality and quantity of library resources could be enhanced by providing reading materials that assist in addressing the education needs of offenders. Access to relevant and up-to-date reading material assists offenders in increasing their literacy level and increases opportunities for obtaining employment and successfully reintegrating into the community.

FINDING 8: COMPUTER RESOURCES

The current evaluation found that software applications and functions available to offenders participating in CSC's Education Programs are limited and are viewed by educational staff as out-dated and not meeting labor market standards. Staff indicated that computers and information technology could supplement the curriculum and provide opportunities for offenders to enhance their computer and employability skills in preparation for release.

FINDING 9: EDUCATIONAL DATA REPORTING

Data limitations make it difficult for the timely and accurate reporting of education program outcomes for offenders. Despite recent infrastructure improvements and the development of a national guide for entering educational data, information is still entered inconsistently or not at all in CSC's Offender Management System.

LIST OF KEY RECOMMENDATIONS

RECOMMENDATION 1: OPTIMIZING DELIVERY

In order to optimize the impact of education on post-release outcomes, CSC should target higher risk offenders, encourage regular and ongoing positive interactions in an environment that facilitates the development of cognitive as well as non-cognitive/social skills. CSC should also aim to increase offender literacy levels from elementary to high school levels of education, and identify and accommodate the needs of offenders with learning disabilities.

RECOMMENDATION 2: INSTITUTIONAL LIBRARIES

CSC should ensure that the educational information needs of offenders are met through access to relevant and up-to-date reading material which supplements CSC's education program and prepares offenders for their release to the community. In addition, institutional libraries should consider ways to control the flow of books in and out of the library (e.g., electronic catalogue and circulation system) to facilitate the tracking and management of CSC's libraries resources, and to increase opportunities to educate offenders in the full use of library resources.

RECOMMENDATION 3: COMPUTER RESOURCES

CSC should consider supplementing educational program material with electronic resources to capitalize on the benefits of computer-assisted learning which will provide opportunities for offenders to gain computer skills needed for increasing literacy levels.

RECOMMENDATION 4: EDUCATIONAL DATA REPORTING

CSC should enhance the timeliness of educational data reporting and ensure that the National OMS procedures are followed when entering educational data into OMS. In addition, CSC should clarify the roles and responsibilities for the assessment of learning disabilities to meet the educational needs of these offenders.

MANAGEMENT ACTION PLAN OVERVIEW

MANAGEMENT ACTION PLAN 1: OPTIMIZING THE DELIVERY OF EDUCATION PROGRAMS

The Management Action Plan (MAP) will ensure that the appropriate offenders are prioritized for educational programming, the appropriate delivery model is applied in each region, and there is clear direction on how learning disabilities will be assessed and accommodated.

MANAGEMENT ACTION PLAN 2: INSTITUTIONAL LIBRARIES AND COMPUTER RESOURCES

The MAP will ensure that materials required in institutional libraries to support offenders in their education program are identified, best practices for tracking library materials are assessed, and additional opportunities to educate offenders in the full use of library resources are recognized. The MAP will also examine the software and electronic resources currently used in CSC's institutions and examine best practices in this area to support offender education programs.

MANAGEMENT ACTION PLAN 3: REPORTING OF EDUCATION DATA IN OMS

The MAP will ensure that procedures for data entry are followed, and that there is appropriate monitoring and reporting on the timeliness and accuracy of data entry.

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LIST OF ACRONYMS

ABE Adult Basic Education AHR Adjusted Hazard Ratio

AWI Assistant Warden of Interventions
CAAT Canadian Adult Achievement Test
CCRA Corrections and Conditional Release Act

CD Commissioner's Directive

CI Confidence Interval

CMEC Council of Ministers of Education, Canada

COMO Cost of Maintaining Offenders CSC Correctional Service of Canada CTS Career and Technology Studies

FY Fiscal Year

GED General Education Development

IFMMS Integrated Financial and Material Management System

K-BIT Kaufman Brief Intelligence Test

K-TEA Kaufman Test of Educational Achievement

LAN Local Area Network
NHQ National Headquarters
OIA Offender Intake Assessment

OMS Offender Intake Assessment
OMS Offender Management System
OPI Office of the Primary Interest

PLAR Prior Learning Assessment and Recognition

RAAI Regional Administrators of Assessment and Interventions

RHQ Regional Headquarters

RPD Reintegration and Programs Division
TBS Treasury Board of Canada Secretariat

WED Warrant Expiry Date

1.0 INTRODUCTION

In accordance with the Five-Year Evaluation Plan, the Correctional Service of Canada (CSC)³ conducted an evaluation of Offender Education Programs and Services. In agreement with the Treasury Board of Canada Secretariat's (TBS) Policy on Evaluation (2009), the evaluation focused on two core objectives, namely: (1) the continued relevance of education programs, including a demonstrable need for educational programming, alignment with departmental/federal government priorities as well as federal roles and responsibilities; and (2) CSC's performance in delivering educational programs and services, including effectiveness, efficiency and economy.

The delivery of correctional education programs is aligned with CSC's priority to enhance public safety as lower education contributes to criminal behaviours. CSC's education programs have been developed to: address offenders' educational needs; increase offenders' basic literacy, social cognition, and problem solving skills; prepare offenders for participation in correctional programs; and, provide offenders with the knowledge and skills necessary to gain and maintain employment and lawfully reside in the community upon their release (Correctional Service Canada Review Panel, 2007; Nafekh, Allegri, Fabisiak, Batten, Stys, Li, et al, 2009; Sharpe & Curwen, 2012). One of CSC's corporate priorities is the safe transition to and management of eligible offenders in the community. Correctional education programs and services, including libraries and computer resources, are increasingly imperative in addressing offenders' educational needs, and thus, contribute to CSC's mandate to successfully reintegrate offenders into the community. As such, the goal of this evaluation is to determine whether CSC is meeting the educational needs of offenders to support their safe transition into the community. Ultimately, this report's results and recommendations will assist CSC's senior management with strategic policy and decision-making regarding CSC's education programs and services.

³ CSC is the federal government agency responsible for administering sentences imposed by the courts that are two years or more. Sentence administration includes the management of correctional institutions of various security levels and the supervision of offenders under conditional release in the community. More information regarding CSC, including policy and legislation, can be found at http://www.csc-scc.gc.ca.

1.0 PROGRAM PROFILE

1.1 BACKGROUND

CSC contributes to public safety by assisting offenders in returning to the community as law-abiding citizens. Providing correctional interventions and programs contributes to this mission by focusing on offenders' dynamic criminogenic needs (i.e., factors contributing to criminal behaviours). Education represents an important area of need and has been highlighted in several empirical studies as a risk factor for criminal behaviour. Approximately 75% of offenders admitted to federal custody on their first sentence between April 1, 2008 and March 31, 2013, self-reported that they did not have a high school diploma or equivalent (i.e., had a need for education programming). This proportion is very high in comparison to approximately 20% of the general population aged 15 or over who did not have a high school diploma in 2010 (Statistics Canada, 2012). Education is a dynamic criminogenic need that can be addressed through reintegration programs, and is therefore included within offenders' Correctional Plans.

CSC's education programs are intended to address offenders' educational needs and facilitate the transition of offenders into the community. Moreover, the sense of achievement and confidence obtained from successfully completing an educational program is intended to encourage offenders to make further positive changes in their lives (Sharpe & Curwen, 2012; Gendron & Cavan, 1990). Multiple studies have shown a link between education achieved while incarcerated and the increased likelihood of gaining and maintaining employment upon release (Cronin, 2011; Davis, Bozick, Steele, Saunders & Miles, 2013; Fabelo, 2002; Gillis & Andrews, 2005; Lockwood, Nally, Ho & Knutson, 2012; Matsuyama & Prell, 2010; Steurer, Smith & Tracy, 2001; Vacca, 2004).

Participation in correctional education has also been associated with reductions in recidivism (Cecil, Drapkin, MacKenzie, & Hickman, 2000 as seen in Tolbert, 2012; CSC, 2000; Gaes, 2008; Phipps, Korinek, Aos, & Lieb, 1999; Wilson, Gallagher, & MacKenzie, 2000; Davis et al., 2013). Multiple studies and meta-analyses have concluded that correctional education promotes successful reintegration. For example, the results of an examination of 97 articles published

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⁴ These offenders were on their first sentence and had an Offender Intake Assessment (OIA). Offenders with low risk and low need had a compressed OIA assessment and did not complete intake questions related to grade 12 education. Therefore they were included in the sample but excluded from the analysis.

between 1969 and 1993 to determine the relationship between correctional education and recidivism rates revealed that there was a positive relationship between correctional education and lower recidivism (CSC, 2000). CSC (1998) conducted a two-year follow-up study of offenders who participated in CSC's education programs. It was found that offenders who had completed grade 8 or grade 10 had reduced rates of re-admissions, and re-offending when compared to non-participants.

1.2 POLICY AND LEGISLATION

According to the United Nations' report (2009) *The Right to Education of Persons in Detention* "all prisoners should have the right to take part in cultural activities and education aimed at the full development of the human personality (article 6, p. 9)". In Canada, education falls within the provincial/territorial jurisdiction (Constitution Act, 1867). However, according to the *Council of Ministers of Education, Canada (CMEC)*, "the federal government is responsible for the education of Registered Indian people on reserve, personnel in the armed forces and the coast guard, and inmates in federal correctional facilities" (Council of Ministers of Education, n.d.). As such, CSC must adhere to the provincial and territorial curricula and guidelines when administering educational programs to inmates. Under section 3(b) of the *Corrections and Correctional Release Act* (CCRA), CSC is responsible for "assisting the rehabilitation of offenders and their reintegration into the community as law-abiding citizens through the provision of programs in the penitentiaries and in the community" (CCRA, 1992). Education is considered to be one of the seven criminogenic need domains, which when addressed contributes to CSC's mandate to enhance public safety.

In addition, the CCRA indicates that CSC should provide a range of programs designed to contribute to the successful reintegration of all offenders and specifically address the needs of women and Aboriginal offenders. Likewise, *Commissioner's Directive* (CD) 720- Education *Programs and Services for Offenders* states "the approaches used in education programs will include aboriginal, multicultural and gender competency considerations (e.g., methods and styles

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⁵ CMEC is an intergovernmental body founded by ministers of education to, among other things, consult and cooperate with national education organizations and the federal government. They provide leadership in education at the pan-Canadian and international levels. CMEC is governed by an Agreed Memorandum approved by all provinces and territories.

of learning) and will also address the specific needs of those identified as having potential learning disabilities, low cognitive functioning or physical disabilities" (CSC, 2007a, s.19). In accordance with CD 720, education programs are delivered "to assist offenders to reintegrate into the community as law-abiding citizens by increasing education levels through the provision of provincially accredited or certified programs" (CSC, 2007a, s.1). In 2007, CD 720 was modified to increase the CSC standard of education from grade 10 to grade 12 or High School Diploma/equivalency⁶ (CSC, 2007a). To achieve this academic requirement, Adult Basic Education (ABE) programming (grade 1 to 12 or its equivalent) is CSC's education priority and becomes a requirement of the Correctional Plan⁷ for every offender whose grade level is below grade 12 or its equivalent (CSC, 2007a). There is no mandatory minimum grade level completion in order to participate in correctional programs but according to CD 720, "grade 8 or equivalent is the foundation for meaningful participation in other programs" (CSC, 2007a, s.13).

In addition, CD 720 states that institutional libraries are information centers that support education programs and have services and computerized resources comparable to those in community libraries, while considering the correctional environment and physical space available (CSC, 2007a). CSC recognizes the importance of computer skills in modern society and encourages the use of computer software through education programs and library services (Correctional Service Canada Review Panel, 2007).

1.3 PROGRAM DESCRIPTION

CSC's education programs and services encompass three key activities to assist offenders in increasing their literacy levels; these include: 1) educational assessments and referral processes; 2) educational programming, and 3) library services and computer resources. The subsequent sections provide detailed descriptions of the key components of CSC's education programs and services.

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⁶ Requirement for grade 12 became official through policy in 2007; however, Treasury Board started funding ABE 4 in 2000-2001 (CSC, 2007b). Thus, grade 11 and 12 were offered to offenders prior to 2007.

⁷ A Correctional Plan is developed for every offender entering the correctional system. The Correctional Plan is completed in consultation with the offender and the case management team and contains the following: a) level of intervention with respect to the offender's needs; b) objectives for the offender's behavior; c) programs and interventions required to manage risk; and, d) court-ordered obligations.

1.3.1 EDUCATIONAL ASSESSMENTS/REFERRAL PROCESSES

Once admitted to federal custody, the educational needs of offenders are assessed during the intake process. An educational assessment is required for all offenders within 90 days of intake unless the offender is unwilling, unable (due to illiteracy, language barrier, visual impairment, medical reasons), or not required to complete an assessment (CSC, 2007a). The educational assessment process varies across regions as different tests are used to assess offenders educational needs and grade level. Documented assessments (e.g., official transcripts, diploma and functional assessments (i.e., results of a standardized testing) are used separately or in tandem to determine the appropriate education level to place an offender. Education becomes an intervention need on individualized Correctional Plans when offenders do not possess a Grade 12 (or equivalent) level of education when entering the correctional system. If the offender's education level is determined to be below grade 12 or equivalent (using either a documented or functional assessment), the offender will be referred to an educational program.

In addition to the documented educational assessment (where educational staff request offenders' transcripts from schools in the community and/or access the information through the Ministry of Education) and the functional assessment (where educational staff conduct standardized testing to determine offenders' level of education), some offenders who are suspected of having learning disabilities undergo learning disability assessments. However, resources and processes for conducting specialized learning disability assessments differ regionally.

1.3.2 EDUCATIONAL PROGRAMMING

CSC's education programs, offer a variety of educational options (e.g., high school equivalency, high school diploma, GED) to meet the individualized educational needs of each offender. Although, educational programming options differ regionally, CSC has the responsibility of ensuring that all education programs offered meet their respective provincial requirements, so that all educational programs will meet the identified educational needs of offenders and lead to

⁸ Offenders are exempted from an educational assessment in cases where recent public education system certification identifies proof of achievement of the minimum level of education to fulfill CD 720 is provided.

⁹ Most regions use either the Canadian Adult Achievement Test (CAAT) or the brief Kaufman Test of Education Achievement II (K-TEA) to assess an offender's initial education level.

¹⁰ Official documents can be requested through the respective Ministry of Education or schools that the offender attended in the community.

the formal recognition, certification or accreditation from an educational authority recognized by the province in which the program is being delivered (CSC, 2007a). For example, the curricula used in each region differ to meet respective provincial requirements. In regions that encompass multiple provinces, one provincial ministry of education certifies the curriculum. For example, in the Atlantic region the curriculum is developed by the contractor and certified by the New Brunswick Ministry of Education. Likewise, in the Prairie region the Alberta Ministry of Education curriculum is used. The respective provincial curricula are used in the Quebec, Ontario and Pacific regions.

Adult Basic Education (ABE) programming which is offered at each of CSC's institutions provides the opportunity for offenders to obtain a high school diploma or equivalency diploma. In addition, one region currently offers the General Education Development (GED) program which allows the offender to obtain a high school equivalency. For offenders who do not speak either official language, the English or French second language program is available. Depending on offenders' individual learning plans and level of education, pre-requisite programs are offered to offenders who wish to pursue specific employment opportunities, vocational programs or post-secondary studies¹¹ and special educational programs are available for those who have difficulties learning. The following sections will provide additional details on CSC's available educational options for offenders.

1.3.3 ADULT BASIC EDUCATION (ABE) PROGRAMMING

ABE programming (grade 1 to 12 or its equivalent) is available in all CSC institutions on a 12-month continuous intake basis (i.e., offenders who have education in their Correctional Plan or who require upgrading of skills as a pre-requisite to other continuing education or reintegration programs may begin and finish ABE programming at any given time during their incarceration). Although ABE is a CSC nationally mandated program, it is provincially accredited. Therefore, the content of ABE programming varies in each of CSC's regions to follow the provincial curricula and guidelines established by the respective Ministry of Education. The program has four levels, ABE I (Grades 1-5), ABE II (Grades 6-8), ABE III (Grades 9-10), and ABE IV (Grades 11-12); in the Quebec region the levels are broken down as ABE I (Grades 1-6), ABE II

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¹¹ Post-secondary studies would include college and/or university programs.

(Secondary I-II), ABE III (Secondary III-IV), and ABE IV (Secondary V). Offenders have met CD 720 requirements once they have completed compulsory courses or credits to obtain the high school diploma or equivalency diploma as required by the provincial Ministries of Education (CSC, 2007a).

There are four (4) core teaching areas in CSC's education curriculum which is based on provincial requirements: Literacy (English and French), Mathematics, Science, and Social Studies. Like in the community, mature students in CSC may earn credits for prior learning, including recognition of the knowledge and skills that have been acquired, in both formal and informal ways. Generally, Prior Learning Assessment and Recognition (PLAR) credits can be granted for participation in select correctional programs and/or prior work experience, and these credits can contribute to obtaining a high school diploma. The criteria for granting credits for PLAR differ in each region depending on the provincial guidelines used.

In all regions, teachers adapt their teaching practices and provide additional assistance within the classroom to meet the specialized educational needs of the offender population. Additionally, some regions offer specialized educational programs for offenders with specific needs that cannot be met in an ABE program.

1.3.4 GENERAL EDUCATION DEVELOPMENT (GED)

The General Educational Development (GED) program encompasses five tests in core subject areas are designed to measure general knowledge, ideas and thinking skills (Independent Learning Centre, 2007). This program, which provides offenders with a high school equivalency, is used in the Atlantic region. Similar to ABE, offenders attend class on a full-time or part-time basis to prepare for the GED exams. Teachers are available to assist offenders with the material and review as necessary.

1.3.5 ENGLISH AND FRENCH AS A SECOND LANGUAGE

Offenders who are unable to read, write or speak in either official language are offered English and French as a second language courses as part of CSC's education programs.

¹² Computer Studies has also been offered as an element of ABE, however this component is not a core area.

1.3.6 INSTITUTIONAL LIBRARIES

CD 720 requires that library resources be available in every federal institution to serve as information centers to support all institutional program needs and address offenders' needs for recreational, cultural, spiritual, educational and informative materials (CSC, 2007a). Library services vary depending on the individual institution; however, most include access to hard copy and electronic materials, which include but are not limited to: books, magazines, newspapers, and online material accessed through a librarian.

1.3.7 COMPUTER RESOURCES

CD 720 indicates that knowledge about and the ability to use computers and information technology is an important component of living in modern society and will be encouraged and enhanced through education programs (CSC, 2007a). Computer access is also available in the library, and/or on the ranges at CSC's institutions. Institutional libraries and computer resources are managed at the regional level.

1.4 LOGIC MODEL

Please refer to Appendix A for CSC's education programs and services logic model which depicts how the previously described key activities are linked to their associated outputs, as well as immediate, intermediate, and long-term outcomes.

1.5 GOVERNANCE STRUCTURE

CSC's education programs are the responsibility of the Reintegration Programs Division (RPD) at National Headquarters (NHQ). CSC has one National Education Manager and five Regional Education Managers. Education programs in CSC institutions are managed regionally and differ regionally in terms of the service delivery model, resources and costs. Currently CSC's education programs in the Atlantic and Pacific regions are provided through a contract delivery model, the Quebec region provides education programs through a Memorandum of Understanding (MOU) with the Ministre de l'Éducation, Loisirs et Sport (MELS), and in the Ontario and Prairie regions education programs are provided using a CSC indeterminate model. According to the governance structure prepared by education programs at the regional level, Regional Administrators of Assessment and Interventions (RAAI) manage education programs

on behalf of the Regional Deputy Commissioner (CSC, 2012). The RAAI manages regional operations, develops and implements standards for effective program delivery, monitors performance of education programs and directs training. In addition, the Regional Manager of Education Programs liaises between Regional and National Headquarters on matters related to education programs, ensures that education programs related data are accurately recorded in OMS, and ensures that the education curriculum in the institution is being administered in accordance with the guidelines from the respective Ministry of Education. In regions where education programs are primarily delivered by a contract agency (Pacific and Atlantic) or directly by the Ministry of Education (Quebec), the Regional Manager of Education Programs liaises between CSC and the contract provider (CSC, 2012).

At the institutional level, the Assistant Warden of Interventions (AWI) manages the Education Program on behalf of the Warden. The AWI is usually assisted by the Chief of Education who directly supervises teachers, librarians and clerical support. In the absence of a Chief of Education, the Manager of Programs assumes these roles and responsibilities. In regions where a contract service delivery model has been implemented, contract staff work in collaboration with the Manager of Programs to deliver Education Programs within the institution. Figure 1 presents the governance structure for Offender Education Programs.

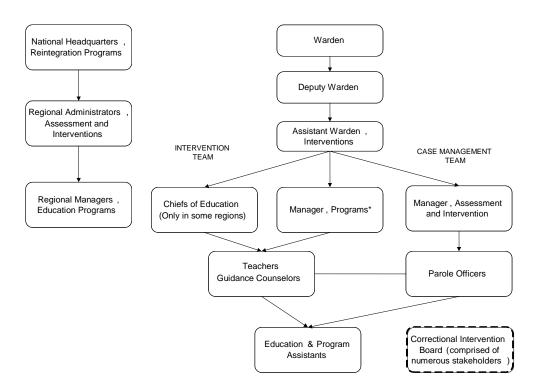


Figure 1: Governance Structure for Offender Education Programs

Note:* In the absence of a Chief of Education, the Manager, Program assumes the roles and responsibilities. Source: Correctional Service of Canada (2012). *Education Programs: National Offender Management System (OMS) Procedures*. Ottawa: ON.

2.0 EVALUATION METHOD

2.1 SCOPE OF THE EVALUATION

A scoping exercise resulted in the determination of six key components:

- Component 1: Relevance
- Component 2: Effectiveness: Education Program Outcomes
- Component 3: Cost-effectiveness
- Component 4: Efficiency: Optimizing the Delivery of Education Programs
- Component 5: Institutional Libraries and Computer Resources
- Component 6: Reporting of Educational Data in OMS

2.2 APPROACH

The evaluation of CSC's Offender Education Programs and Services used a mixed-method research design, incorporating both qualitative and quantitative methodologies. Several lines of evidence were used to address the evaluation issues and questions including:

Literature and document review: An extensive examination of peer-reviewed literature on correctional education in Canada and in other jurisdictions was conducted.

- Documents from professional publication databases were used (PsychInfo, PubMed, Criminological Abstracts);
- CSC and other governmental documents/reports (e.g., legislation, policies, evaluations, research reports and other operational documents); and
- Environmental scan of correctional education in other jurisdictions.

Analysis of automated offender data: Various sources of automated data were used including:

- Offender Management System (OMS) data pertaining to education programs and correctional outcomes;
- Financial information for education programs expenditures retrieved from the Integrated Financial and Material Management System (IFMMS);
- Cost of maintaining offenders (COMO).

On-line survey with CSC staff/managers and contracted staff/contract owners: An electronic questionnaire was designed using SNAP surveys to collect the views and opinions of CSC staff and contract agencies involved in CSC's educational programs and services. The questionnaire was launched in January 2014. A total of 196 participants responded to the online questionnaire.

Interviews with offenders: Semi-structured interviews developed by the evaluation team were conducted with offenders who were participating or who had participated in CSC's education programs. Interview questions captured the offenders' experience within CSC education programs, and any impact that their participation may have had on other areas of their lives. Offenders also had the opportunity to identify areas where they perceived challenges, as well as identify areas of success. In total 250 interviews were conducted with offenders.

2.3 PROCEDURES AND ANALYSES

2.3.1 QUANTITATIVE DATA

Release cohort

The release cohort used for the quantitative analyses of correctional outcomes comprised 4,526 federally-sentenced offenders released on day parole, full parole or statutory release from April 1, 2012 to March 31, 2013. The time period span was chosen because education information data has increase in quality in this specific time period. Data were extracted from the Offender Management System (OMS), a computerized case file database used by CSC to manage information on federal offenders.

The majority of offenders examined in this cohort were men (93.5%, n = 4,230) and Caucasian (61%; n = 2,761). Aboriginal offenders accounted for 22% (n = 979) of the sample and 17% (n = 773) offenders presented other ethnicities. The average age at release was 37.3 years (SD = 11.9) with an average sentence length of 3.52 years and average 768.2 days incarcerated. The majority of offenders were released on statutory release (60%; n = 2706), 38% (n = 1,715) were released on day parole and 2.3% (n = 105) on full parole. Participants were released in the Atlantic (10.9%; n = 493), Quebec (22.5%, n = 1,018), Ontario (25.5%; n = 1153), Prairie (29.7%; n = 1,343), and Pacific (11.5%; n = 519) regions. In terms of security level, 33.6% (n = 1,491) of the retrospective cohort was released from minimum security institutions, 46.4%

(n = 2,059) from medium security, 7.8% (n = 344) from maximum security and 12.3% (n = 547) from multi-levels institutions.

Financial data

Financial data for were extracted from CSC's Integrated Financial & Material Management System (IFMMS) and analyzed by the evaluation team using Microsoft Excel to calculate the overall cost of education programs, as well as perform analyses on the cost-effectiveness of education programs.¹³

2.3.2 QUALITATIVE DATA

Structured-interviews with offenders

The purpose of structured-interviews was to capture offenders' perspectives and experience in CSC's education programs. A purposeful sample of offenders was selected and stratified according to region, gender, Aboriginal ancestry and security level. A total of 250 offenders were interviewed between January and February 2014. The evaluation team developed a questionnaire in collaboration with key stakeholders from NHQ and RHQ. The questionnaire included both open and close-ended questions. Data from the interviews were analyzed using various software programs (i.e., SNAP, SPSS, Microsoft Excel). A content analysis procedure was used by the evaluation team to analyze open-ended questions and identify emerging themes. Data obtained through close-ended questions were analyzed using descriptive analysis techniques.

Electronic questionnaire

CSC's institution, regional, and national managers and staff members, as well as contracted staff and contract owners involved in education programs were invited to complete an on-line questionnaire pertaining to education programs and services. Respondents were routed to specific questions depending on their position/role in education programs and services. In total, 196 individuals completed the questionnaire.

¹³ It is not possible to examine costs of each level of ABE programming individually because of discrepancies in financial information reporting.

2.4 MEASURES

Education program participation and achievements

Two exposure variables were created to examine the impact of education on post-release outcomes:

- 1. The level of participation in education programs; and,
- 2. The number of achievements completed.

To determine the impact of the level of participation in education programs on post-release outcomes, offenders who reported an educational need at intake (did not possess a high school diploma or equivalent) were categorized in three groups:

- 1. Offenders who were never assigned to an education program;
- 2. Offenders who were assigned to an education program, but did not complete an education program level or GED; and,
- 3. Offenders who were assigned and completed an education level or GED.

The second measure of education program exposure refers to the number of achievements completed. Participants were categorized in four groups based on the number of educational achievements recorded in their file:

- 1. Completion of 1 to 5 educational achievements;
- 2. Completion of 6 to 10 educational achievements;
- 3. Completion of 11 to 15 educational achievements; and
- 4. Completion of more than 15 educational achievements.

Please note that an educational achievement could represent the completion of the following: a module, full course, and/or credits earned through PLAR. As such, it is possible to complete a number of educational achievements without having completed an education program level (e.g., ABE level or GED) depending on the type of achievement.

Community employment

A dichotomous variable was created to examine community employment after release. For offenders who had more than one employment after release, the dates of the first employment were chosen for the analysis.

Revocation for a violation of conditional release

Two measures of revocation for conditional release violation were created: 1) any revocation; and 2) revocation for a new offence before reaching their warrant expiry date (WED). Offenders were not followed beyond WED. A follow-up period of one year was used to examine the impact of education on post-release outcomes.

Analysis of Qualitative Data

The following scale was used throughout the current report to indicate the weight of emerging qualitative themes¹⁴ and to facilitate the interpretation of evaluation results.

- *a few/a small number of interviewees* = less than 25 per-cent;
- *some interviewees* = 25 to 45 per-cent;
- about half = 45 to 55 per-cent;
- *many interviewees* = 56 to 75 per-cent;
- *most interviewees* = over 75 per-cent; and
- *almost all interviewees* = 95 per-cent or more.

2.5 LIMITATIONS

Through the evaluation of CSC's Education Programs and Services, a number of data quality issues, namely in the area of data tracking and reporting, were identified with the educational data recorded in OMS, and should be taken into consideration when interpreting the results presented in the report. Also, given newly improved data quality, a recent release cohort was used for the current evaluation; limiting the follow-up time examined. Please refer to *Component 6: Reporting on Educational Data in OMS* which identifies the specific issues and the approach taken to mitigate these limitations. *Component 6: Reporting on Educational Data in OMS* identifies specific issues related to the timeliness and consistency of reporting educational

¹⁴ This scale has been adapted from Employment and Social Development Canada (ESDC), formerly known as Human Resource and Skills Development Canada.

CSC Education Programs and Services Evaluation

outcome data and the assessment and recording of learning disabilities. The evaluation used this evidence to formulate a recommendation to enhance the overall reporting of CSC's educational data.

3.0 KEY FINDINGS

The key findings of the Evaluation of Offender Programs and Services are presented under the following six key components:

- Component 1: Relevance
- Component 2: Effectiveness: Education Program Outcomes
- Component 3: Cost-effectiveness
- Component 4: Efficiency: Optimizing the Delivery of Education Programs
- Component 5: Institutional Libraries and Computer Resources
- Component 6: Reporting of Education Data in OMS

COMPONENT 1: RELEVANCE

3.1 RESPONSIBILITY FOR DELIVERING EDUCATION PROGRAMS

Finding 1: Responsibility for Delivering Education Programs

The education of inmates in federal correctional facilities is the responsibility of the federal government and CSC has a role and responsibility to deliver programming that contributes to offender rehabilitation including educational programming.

Evidence:

Education falls under the jurisdiction of the Canadian provinces (*Constitution Act*, 1867); however, the education of inmates in federal correctional facilities is the responsibility of the federal government and CSC has a role and responsibility to deliver programming that contributes to offender rehabilitation including educational programming. According to the Council of Ministers of Education, Canada (CMEC), ¹⁵ "the federal government is responsible for the education of Registered Indian people on reserve, personnel in the armed forces and the coast guard, and inmates in federal correctional facilities" (n.d.). In addition, according to a United Nations report, *The Right to Education of Persons in Detention* (2009), "all prisoners should have the right to take part in cultural activities and education" (article 6, p. 9).

Educational programming addresses the federal government's priority concerning education, literacy and economy. As a member of the United Nations Literacy Decade from 2003-2012, (Council of Ministers of Education Canada, Human Resources and Social Development Canada & Canadian Commission for UNESCO, 2007) the Government of Canada made it a priority to improve the literacy skills of Canadians by 2015 and in their progress report to UNESCO, identified CSC as providing education to offenders ¹⁶. Protecting jobs and the economy is another

¹⁵ CMEC is an intergovernmental body founded by ministers of education to, among other things, consult and cooperate with national education organizations and the federal government. They provide leadership in education at the pan-Canadian and international levels. CMEC is governed by an Agreed Memorandum approved by all provinces and territories.

¹⁶ The federal government builds literacy and essential skills through the Office of Literacy and Essential Skills which works with partner organizations to help employers, practitioners and trainers assist Canadians in developing

federal government priority (Government of Canada, 2013). It is important that offenders improve their education so they may increase their opportunities of gaining and maintaining employment and contribute to the Canadian economy. Higher educational levels provide opportunities to earn higher income and earnings which stimulates the economy as people consume goods and services based on their total budget (Kuenne, 2003)¹⁷. It is thus relevant for the Government of Canada to offer education programs that will increase offenders' overall contribution to the Canadian economy.

Education programming also supports CSC's strategic priority to enhance public safety by supporting the safe transition of eligible offenders into the community. Lower education has been identified as a contributing factor to criminal behaviours (Aaltonen, Kivivuori & Martikainen, 2011) and educational programming contributes to public safety as it provides offenders with the knowledge and skills necessary to gain and maintain employment and lawfully reside in the community. The current evaluation found that educational programs within CSC's institutions have a positive effect on post-release outcomes for different groups of offenders, specifically, higher risk offenders who upgraded their education by more than 10 educational achievements.

the skills necessary to evolve with their jobs and adapt to change (Council of Ministers of Education, Human Resources and Social Development Canada & Canadian Commission for UNESCO, 2012).

¹⁷ The average earnings (average of \$37,403 [Statistics Canada, 2010]) for those who have a high school diploma are higher than those without a high school diploma (average of \$32,000 for less than a high school [Statistics Canada, 2010]); Council of Ministers of Education, n.d.).

3.2 NEED FOR EDUCATIONAL PROGRAMMING

Finding 2: Need for Educational Programming

There is a demonstrable need for educational programming in Canadian federal institutions.

Evidence:

Federally sentenced offenders present important educational needs. Approximately 75% of offenders admitted to federal custody on their first sentence between April 1, 2008 and March 31, 2013, 18 reported that they did not have a high school diploma (or equivalent; see Figure 2). A higher proportion of women offenders reported that they had completed high school or equivalent before incarceration (35%) compared to men (25%). 19 Also, a higher percentage of non-Aboriginal offenders reported that they had completed high school or equivalent before incarceration (29%) compared to Aboriginal offenders (14%). 10 In contrast, roughly 80% of the Canadian population (15 or older) graduated from high school in 2010 (Statistics Canada, 2012). Compared to the general Canadian population, a larger proportion of federally-sentenced offenders did not complete high school (or equivalent) and are therefore more likely to have lower literacy levels impacting their ability to actively participate in correctional programs and maintain employment (Correctional Service Canada Review Panel, 2007).

¹⁸ Offenders who were on their first sentence and had an Offender Intake Assessment (OIA). Offenders with low risk and low need had a compressed OIA assessment and did not complete intake questions related to grade 12 education. Therefore they were included in the sample but excluded from this analysis examining level of offender need at intake.

¹⁹The difference between men and women is statistically significant ($\chi^2(1, N = 11,524) = 34.22, p < 0.0001$)

²⁰The difference between Aboriginal offenders and non-Aboriginal offenders is statistically significant ($\chi^2(1, N = 11,386) = 217.67, p < 0.0001$).

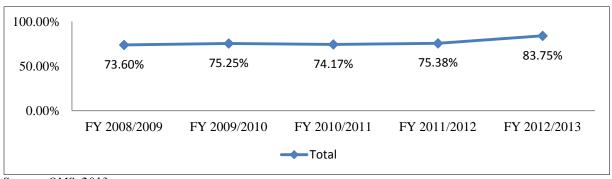


Figure 2: Proportion of Offenders with Less than a High School Diploma or Equivalent

Source: OMS, 2013

Notes: a 19% (n = 2,691) total missing data: Includes 7% [n = 191] missing data; 17% [n = 465] self-reported unknown; and 76% [n = 2,035] missing data due to low needs and low risk offenders who completed OIA compressed, which do not include questions on high school completion.

Low levels of educational achievement is a criminogenic need that can be addressed through reintegration programs (i.e., education programs), and is therefore considered within offenders' Correctional Plans. Increasing offenders' literacy may enhance participation and the benefits received from correctional programs (CSC, 2013b) given that "low levels of educational attainment and learning disabilities reduce the overall impact of correctional programming and community outcomes" (Nafekh et al, 2009, p.157-158). Furthermore educational programming has been found to contribute to public safety given that it provides offenders with the knowledge and skills necessary to gain and maintain employment (Costello and Langelid, 2011; Nally, Lockwood, Ho, & Knutson, 2012) and lawfully reside in the community upon their release (Cecil, Drapkin, MacKenzie, & Hickman, 2000 as seen in Tolbert, 2012; CSC, 2000; Gaes, 2008; Phipps et al., 1999; Wilson et al., 2000; Davis et al., 2013).

The standards of the Canadian labour market have increased making it difficult for offenders to find and maintain employment due to their low education levels. Since the 1990s, 84% of new jobs required at least a high school diploma (Correctional Service Canada Review Panel, 2007). Given that approximately 75% of offenders reported that they do not have a high school diploma (or equivalent) when entering the federal correctional system, they are further disadvantaged in terms of finding and maintaining employment in the community if their educational needs are not addressed during incarceration.

COMPONENT 2: EFFECTIVENESS: EDUCATION PROGRAM OUTCOMES

3.3 EFFECTIVENESS: EDUCATION PROGRAM OUTCOMES

Finding 3: Effectiveness: Education Program Outcomes

Offender participation in educational programming had an overall positive impact on public safety outcomes, particularly for high risk offenders who upgraded their education by more than 10 educational achievements²¹.

Evidence:

The current evaluation examined the impact of participation in CSC's education programs, ²² as well as the impact of the number of educational achievements ²³ on offenders' rate of employment obtainment and conditional release failure. ²⁴ These analyses examined post-release outcomes for different offender groups (e.g., Aboriginal and non-Aboriginal, men and women, and low, medium and high risk) and focused on offenders who had a need for educational programming. Overall, the evaluation found that educational programs within CSC's institutions have a positive effect on post-release outcomes for different groups of offenders, specifically high risk offenders who upgraded their education by more than 10 educational achievements. ²⁵

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²¹ An educational achievement could represent the completion of a module, full course, and/or credits granted for participation in correctional and vocational programs, prior learning and work experience (e.g., Prior Learning Assessment and Recognition).

²² Offenders who reported an educational need at intake (did not possess a high school diploma or equivalent) were

²² Offenders who reported an educational need at intake (did not possess a high school diploma or equivalent) were categorized in three groups: 1) offenders who were not assigned to an education program (reference category); 2) offenders who were assigned to an education program but did not complete a program level; and 3) offenders who were assigned and completed an education level.

²³ Participants were categorized in four groups based on the number of educational achievements recorded in their file (>0 and<=5 (reference category); >5 and <=10; >10 and <=15; and, >15 and <=58).

²⁴ Conditional Release: Offenders released into the community who agree to abide by certain conditions that restrict their activities.

²⁵ All analyses controlled for offender profile differences in regard to the level of overall risk, need, sex, Aboriginal ancestry, time incarcerated, ABE assessment level and release region. Employment analyses also controlled for motivation level and employment and conditional release failure analysis also controlled for age at release. Participation in correctional programs was not controlled for as no significant interaction between education and correctional programs was observed.

Details of the analyses are presented in the following sections, organized by public safety outcomes for male offenders.

Employment

Higher risk offenders who participated in education programs had better employment outcomes than higher risk offenders who did not participate.

The evaluation team performed statistical analyses²⁶ to compare the rate of community employment obtainment of male offenders who had an educational need and were not assigned to an education program, to those who had a need, were assigned, but did not complete an education level, and to offenders who had a need, were assigned and had at least one education program level completion. Overall results revealed that high risk non-Aboriginal offenders who had at least one education level completion presented a 62% higher rate of obtaining community employment compared to high risk offenders who were not assigned to an education program (HR= 1.62; CI 1.01 - 2.58 (see Table 1). A separate analysis found that for medium risk Aboriginal offenders the rate of employment obtainment was 73% higher for those that completed education programs compared to medium risk offenders who were not assigned to an education program (AHR = 2.65; 95% CI 1.41-5.95)²⁷.

Employment outcomes were better for non-Aboriginal participants that had a greater number of educational achievements.

Similar statistical analyses were performed to determine if the number of educational achievements was associated with the rate of obtaining employment in the community. Results showed that as the number of educational achievements increased, the rate of obtaining employment in the community also increased. Specifically, high risk offenders who had between 11 and 15 educational achievements presented a 67% higher rate of employment obtainment in comparison to high risk offenders who had between 1 and 5 educational achievements (AHR = 2.07; 95% CI 1.38-3.11). High risk offenders who had more than 15 educational achievements presented a 69% higher rate of employment obtainment in comparison to high risk offenders who

²⁶ Cox regression with proportional hazards procedure was used to examine the impact of participation in education programs on community employment. Analyses using the Cox regression procedure controlled for offender profile difference in regard to the level of overall need and motivation assessed at intake, age at release, time incarcerated, release region and educational assessment level.

Medium risk, Aboriginal offenders who participated in education programs but did not complete a program had a higher rate of employment obtainment than those who were not assigned (AHR = 2.94, 95% CI 1.32-6.55).

had between 1 and 5 educational achievements (AHR = 2.21; 95% CI 1.37-3.54) (see Table 1). The number of educational achievements was not a significant indicator of the rate at which Aboriginal offenders obtain employment in the community.

The current evaluation was unable to report on results for women offenders using the same statistical model that was applied to male offenders²⁸. However, by removing the controlling factors it was found that public safety outcomes were positive for women offenders who had more than 10 educational achievements. Specifically, through further analysis (i.e., limiting confounding variables) the current evaluation found that women offenders who had more than 10 educational achievements presented a 81% higher rate of obtaining community employment compared to women offenders who had less than 10 educational achievements (AHR = 1.81, 95% CI 1.01-3.26).

Table 1: Adjusted Hazard Ratio – The Rate of Obtaining Employment in the Community when High Risk, Non-Aboriginal, Male Offenders with an Education Need are exposed to Education Programs

Variable	ß	Standard Error	Chi- Square	Adjusted Hazard Ratio (AHR)	Confidence Interval (CI) 95%	P Value
Education Exposure						
No Assignment (ref)						
Assignment no - completion	0.32	0.24	1.84	1.38	[0. 87-2.19]	0.1753
Program completion	0.48	0.24	4.06	1.62	[1.01-2.58]	0.0440
Education Achievements Education Achievements <=5 (ref)						
Education Achievements > 5 and <=10	0.18	0.18	0.93	1.19	[0.84-1.70]	0.3339
Education Achievements >10 and <=15	0.73	0.21	12.40	2.07	[1.38-3.11]	0.0004
Education Achievements >15 and <=58	0.79	0.24	10.71	2.21	[1.37-3.54]	0.0011

Note: Analyses were conducted on a sub-group of offenders who reported an educational need at intake. Hazard ratios are adjusted for the effect of age at release, overall criminogenic need at intake, motivation level at intake, release region, number of days incarcerated, level of education at first assessment.

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²⁸There were not enough women to conduct the analysis while including all of the covariates that impacted public safety outcomes A valid analysis could not be conducted without including all of the covariates as there are not enough observations in the reference group (offenders with an education need who were not assigned to an education program) N = 99; number of covariates = 12, reference group = 12.

Conditional Release Failure

Higher risk offenders who participated in education programs had better conditional release outcomes than higher risk offenders who did not participate.

As part of the current evaluation, statistical analyses were performed to compare the rate of conditional release failure of male offenders who had an educational need and were not assigned to an education program, to those who had a need were assigned but did not complete an education level, and to offenders who had a need, were assigned and had at least one education program level completion²⁹. Results indicate that medium risk, non-Aboriginal, male offenders who completed at least one education level had a 40% lower rate of conditional release failure (with any return³⁰) than medium risk, non-Aboriginal, male offenders who were not assigned to an education level (AHR = 0.60; 95% CI 0.39-0.92). As presented in table 2, results were even stronger for high risk offenders who completed at least one education level as they had a 62% lower rate of conditional release (with any return) than high risk offenders who did not complete an education level (AHR = 0.38; 95% CI 0.25-0.56)³¹. In addition, high risk, non-Aboriginal, male offenders who participated in education programs but did not complete an achievement had a 53% lower rate of conditional release failure (with any return) then those who had an education need but did not participate in an education program (AHR = 0.47; 95% CI 0.32-0.68). Similarly, high risk, non-Aboriginal, male offenders who were assigned to an education program presented a 66% (AHR = 0.34, 95% CI = 0.17-0.68) decrease in the rate of conditional release failure for a new crime compared to offenders who had a need but were not assigned. Furthermore, offenders who completed at least one education program level presented a 75% (AHR = 0.25; 95% CI = 0.11-0.54) decrease in the rate of conditional release failure for a new crime compared to offenders who had a need for education but were not assigned to an education program (see Table 2).

²⁹ Cox regression with proportional hazards procedure was used to examine the impact of participation in education programs on conditional release failure. Analyses using the Cox regression procedure controlled for offender profile difference in regard to the level of overall need assessed at intake, release type, age at release, time incarcerated, release region and educational assessment level.

³⁰ Conditional release failure (with any return) includes: revoked, terminated by Parole Board of Canada, and incarcerated.

 $^{^{31}}$ High risk male offenders who participated in education programs had a 53% lower rate of conditional release failure than those who were not assigned to an education program (AHR = 0.47, 95% CI 0.32-0.68).

Conditional release outcomes were better for high risk non-Aboriginal participants that had a greater number of educational achievements.

Similar statistical analyses were performed to determine if the number of educational achievements had an effect on the rate of conditional release failure. Results show that high risk, non-Aboriginal, male offenders who completed between 11 and 15 educational achievements had a 47% lower rate of conditional release failure (with any return) compared to a group of offenders who had between 1 and 5 educational achievements (AHR = 0. 53; 95% CI = 0.30-0.93). High risk, non-Aboriginal, male offenders who completed more than 15 educational achievements presented even better results as 57% had a lower rate of conditional release failure (with any return) compared to a group of offenders who had between 1 and 5 educational achievements (AHR = 0. 43; 95% CI = 0.19-0.95). The number of educational achievements was not a significant indicator of conditional release failure with a new offence for non-Aboriginal, male offenders.

The same analyses were conducted separately for Aboriginal and women offenders. Results indicate that low risk, Aboriginal, male offenders who completed an education program level had a 86% lower rate of conditional release failure (with any return) compared to Aboriginal offenders who had an educational need, but were not assigned to an education program (AHR = 0.14; 95% CI = 0.021-0.89). High risk, Aboriginal, male offenders who completed an education program level had a 38% lower rate of conditional release failure (with any return) compared to Aboriginal offenders who had an educational need, but were not assigned to an education program (AHR = 0.62; 95% CI = 0.39-0.99). Education program completion was not a significant indicator of conditional release failure with a new offence for Aboriginal offenders. The number of educational achievements was not a significant indicator of conditional release failure for Aboriginal offenders. The current evaluation was unable to report on results for women offenders using the same statistical model that was applied to male offenders³² and further analysis (i.e., limiting confounding variables) did not demonstrate any significant results on conditional release failure for women offenders who participated in education programs compared to those who did not.

³²There were not enough women to conduct the analysis while including all of the covariates that impacted public safety outcomes A valid analysis could not be conducted without including all of the covariates as there are not enough observations in the reference group (offenders with an education need who were not assigned to an education program) N = 99; number of covariates = 12, reference group = 12.

Table 2. Adjusted Hazard Ratio – The Rate of Any Revocation when High Risk, Non-Aboriginal, Male Offenders with an Education Need are Exposed to Education Programs

Variable	Parameter estimate	Standard Error	Wald	Adjusted Hazard Ratio (AHR)	Confidence Interval (CI) 95%	P Value
Education Exposure						
No Assignment (ref)						
Assignment no - completion	-0.76	0.19	116.10	0.47	[0.32-0.68]	< 0.0001
Program completion	-0.98	0.20	23.58	0.38	[0.25 - 0.56]	< 0.0001
Education						
Achievements						
Education						
Achievements 1 and						
<=5 (ref)						
Education						
Achievements >5 and <=10	-0.21	0.19	1.17	0.81	[0.56-1.19]	0.2791
Education						
Achievements >10and <=15	-0.63	0.29	4.85	0.53	[0.30-0.93]	0.0276
Education						
Achievements >15 and <=58	-0.85	0.41	4.40	0.43	[0.19-0.95]	0.0360

Note: Analyses were conducted on a sub-group of offenders who reported an educational need at intake. Hazard ratios are adjusted for the effect of release type, age at release, overall criminogenic needs at intake, release region, number of days incarcerated, level of education at first assessment.

Participation in education programs had an additive effect on participation in nationally recognized correctional programs for non-Aboriginal offenders.

In addition to the above analyses, the current evaluation also examined the additive effect of participation in education programs and nationally recognized correctional programs. It was found that non-Aboriginal offenders, who completed a national correctional program and who also completed an education level, had 80% lower rates of conditional release failure than those who did not complete an education level (AHR = 0.20, 95% CI 0.09-0.43). Participation in a nationally recognized correctional program in combination with participation in education programs was not a significant indicator of the rate of conditional release failure for Aboriginal offenders. Statistical analyses revealed no significant interaction between participation in education programs and participation in nationally recognized correctional programs. As such, the positive effects of nationally recognized correctional programs as established in the

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Evaluation Report: Correctional Service Canada's Correctional Programs (2009), and the positive impacts of education program participation, were found to be independent of each other.

3.4 TYPE OF EDUCATION PROGRAM

Finding 4: Type of Education Program

When comparing high risk, non-Aboriginal offenders who completed GED to those who completed ABE IV, no significant differences were found for revocations with a new offence and employment outcomes. In addition, GED credentials were reported to be less valued in the community than a high school diploma. GED is also no longer recognized by the Ministry of Education in some provinces.

Evidence:

The current evaluation found that overall, there were no significant differences for revocations with a new offence and rates of obtaining employment in the community between those offenders who completed ABE IV compared to those that completed GED³³. In the Atlantic region, the only region where GED programming is currently offered, no significant differences were found between GED and ABE IV on public safety outcomes. In addition, educational staff reported that GED credentials are not valued in the community the same way that having a high school diploma is valued (61%; n = 54) and that GED program is too easy and does not develop a foundation in subjects, skills or learning (22%; n = 20). GED is no longer recognized by the British Columbia Ministry of Education (British Columbia Ministry of Education, n.d.) and CSC has phased out GED in the Prairie and Pacific regions.

Implications:

Given that the majority of offenders have a need for educational programs and the current evaluation found that educational programs have a positive effect on post-release outcomes, specifically for higher risk offenders, it is important for CSC to continue to provide educational programs in order to assist offenders with successfully reintegrating into the community and contributing to public safety. Providing educational programs that are based on offenders' career objectives and that align with increasing standards of the Canadian labour market (e.g.,

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³³ The current evaluation found that high risk, non-Aboriginal offenders who completed GED programming presented a lower rate of overall conditional release failure (i.e., both technical revocations and revocations with a new offence) than those who completed ABE IV (AHR = 0.54, 95% CI 0.37-0.80).

anticipated rates of employment growth from 2011-2020 is 69.8% in occupations requiring post-secondary education [Human Resources and Social Development Canada, 2014]), will increase opportunities for offenders to find and maintain employment and decrease returns to custody. As such, it is important for CSC to continue to develop individualized education plans to meet the educational needs of offenders.

The educational and economic benefits of GED attainment are less than those of completing a high school diploma (Smith, 2003), and GED is no longer recognized by all ministries of education. However, as part of the current evaluation questionnaire respondents reported that GED is a quick way to obtain a high school equivalency certificate (49%; n = 48), GED is useful for gaining employment and continuing education in the community (44%; n = 43), and GED engages offenders who may not otherwise participate in education programs (10%; n = 10). Therefore, education staff should be aware of and provide educational programming that best meets the needs of specific groups of offenders in each region (CSC, 2005). Previous CSC research found that offenders who were employed in the community were more likely to remain on conditional release and were less likely to return to custody with a new offence than those who were unemployed (CSC, 2005).

Next Steps:

Chiefs of education, teachers and guidance counsellors should continue to meet with offenders to identify educational needs and goals and update individualized education plans for each offender. This practice is encouraged at every institution in order to align offender educational needs with their career/educational objectives increasing their likelihood of finding and maintaining employment in the community and enhancing their successful reintegration into the community contributing to public safety.

COMPONENT 3: COST-EFFECTIVENESS

CSC's Offender Education Programs and Services are cost-effective based on comparatively lower costs re-incarcerating program participants versus non-participants. The cost of re-incarcerating participants is on average less than a comparison group of non-participants given that participants recidivate at lower rates than non-participants. As discussed in *Findings in Focus Component 2: Education Program Outcomes*, participation in education programs increases offenders' rates of job attainment and decreases offenders' rates of conditional release failure which contribute to the overall cost effectiveness of the program. The evaluation team employed the methodology^{34, 35}used by the RAND Corporation³⁶ (Davis et al., 2013) to conduct the cost-effectiveness analysis while using CSC data to estimate recidivism rates and costs of reincarceration.

3.5 COST-EFFECTIVENESS OF OFFENDER EDUCATION

Finding 5: Cost-Effectiveness of Offender Education

Addressing offenders' educational needs contributes to successful public safety outcomes. Using a rigorous approach to analyze the direct costs associated with education program delivery and correctional outcomes, the evaluation suggests that CSC's education programs are cost-effective.

Evidence:

Using CSC data to estimate recidivism rates and the costs of re-incarceration, the evaluation team used the RAND methodology to examine the cost-effectiveness of CSC's offender education programs. The current evaluation found that education programs are cost-effective given that education program participants typically recidivate at lower rates than non-participants

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³⁴ The meta-data-based study conducted by the RAND Corporation (Davis et al., 2013), used as a model for this evaluation, found that cost effectiveness was achieved when the direct costs associated with the participant group (educational program costs plus potential re-incarceration costs) are less than those associated with the non-participant group (potential re-incarceration costs).

³⁵ The RAND study incorporated the following variables to determine overall cost-effectiveness: cost per participant; cost of re-incarceration; rate of re-incarceration for both participants in the education programs and non-participants.

³⁶ The RAND Corporation is a non-profit research institution based in California with offices in North America and Europe that employs 1,700 staff who work to improve policy and decision-making through high quality and objective research analysis.

and the direct costs associated with the participant group (educational program costs plus potential re-incarceration costs) are less than those associated with the non-participant group (potential re-incarceration costs).

The RAND study incorporated the following variables to determine overall cost-effectiveness: cost per participant; cost of re-incarceration; rate of re-incarceration for both participants and non-participants. The direct costs associated with the participant group (education program costs plus potential re-incarceration costs) were compared to the direct costs of the associated with the non-participant group (potential re-incarceration costs). The evaluation team applied this methodology using CSC data to conduct a cost effectiveness analysis for CSC's Education Programs. Please see below for additional details on how variables in the RAND methodology were replicated and applied using CSC's data:

Cost per participant

Financial data from CSC revealed that the total costs of education programs were \$23,554,829 in FYE2013³⁷. The evaluation team examined all enrollments to CSC's Education Programs in FYE2013, and counted the number of unique offenders (7,986) to determine cost per participant, which equalled to \$2,950.

Cost of Re-incarceration

Cost of re-incarceration was determined by multiplying the average length of stay for the release cohort by the estimated cost of maintaining offenders (COMO). The average length of stay (time offenders spent in an institution before their first release) for the release cohort of offenders used for the current evaluation was approximately 2.1 years. Thus the average cost of re-incarceration was calculated to be \$241,407 (\$114, 783 X 2.1 years).

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³⁷ This represents 93% of all costs allocated to offender education cost centers and *excludes*: community college; university; keys to family literacy; pre-requisites for post-secondary education; and library services. These totalled \$1,784,751 for FYE2013.

Rates of Re-incarceration

Following the RAND methodology, the current evaluation found that the revocation rate for offenders who did participate in the education program³⁸ was 43.75%, compared to 52.63% for non-participants³⁹.

Cost-effectiveness Analysis using the RAND methodology

As demonstrated in previous components of the current evaluation as well as in the above analysis examining the rates of re-incarceration, participants of CSC's Education Program had lower rates of re-incarceration in comparison to non-participants. These lower re-incarceration rates were associated with lower re-incarceration costs. For example, the re-incarceration costs per 100 program participants would be \$10,916,871 compared to \$12,794,585 per 100 non-participants, a difference of \$1,877,714⁴⁰. Given it costs \$295,000 to deliver education programs to 100 offenders, CSC's education programs are cost-effective.

Tangible Costs of Crime

In addition to the direct costs considered in the current analysis, a reduction in: financial costs of incarceration, burden upon victims and society, and burdens on law enforcement agencies and court systems, all contribute to cost-effectiveness of CSC's offender education programs. In 2008, $tangible^{4l}$ costs of crime (net of federal corrections costs) were estimated to be on average \$11,805⁴² per offence (Department of Justice, 2008; Statistics Canada, 2014). Although the RAND methodology did not consider the tangible costs of crime, these additional costs are noteworthy. In the context of this evaluation, CSC's offender education programs may also play a role in reducing the costs of crime by an additional \$104,828⁴³ in tangible costs for every 100 participants. Furthermore, optimizing the delivery of CSC's education programs could extend positive impacts to more offenders resulting in increased levels of cost-effectiveness.

³⁹ Non-participants were offenders with an education need who were not assigned to an education program

³⁸ Participants were offenders with an education need who were assigned to an education program,

⁴⁰ The difference of reincarceration costs for program participants and non participants was calculated in the following manner: (([44*\$241,407] + [\$2,950*100])-(53*\$241,407).

⁴¹ The Justice Canada study estimated that *tangible* costs of crime for 2008 were \$31.4 billion and that there were also intangible costs which were estimated to be \$68.2 billion which included pain and suffering as well as lost quality of life. The study also estimated that 82% of these intangible costs are shouldered by victims of crime. (DOJ, 2008).

 $^{^{42}}$ 2,485,043 incidents in 2008 / (31.4 B in total tangible costs – 2.06B in federal correctional costs) = an average of \$11.805/incident.

 $^{^{43}}$ (100 non-participants X 52.63% revocation rate X \$11,805) – (100 participants X 43.75% revocation rate X \$11,805) = \$104,828

Implications:

Overall, evaluation findings demonstrate that education has a positive impact on post-release outcomes which translates in overall improved public safety as well as decreased financial burdens on CSC, its public safety partners and Canadians. As noted in the next component of this evaluation, optimizing the delivery of education services could extend positive impacts to more offenders resulting in improved levels of cost-effectiveness.

COMPONENT 4: EFFICIENCY: OPTIMIZING THE DELIVERY OF CSC'S OFFENDER EDUCATON PROGRAMS

As previously noted in *Component 2: Education Program Outcomes*, participation in CSC's Education Programs positively contributes to the safe reintegration of offenders into the community. The evaluation also found that CSC's Education Programs and Services were delivered in a cost-effective manner, however, several areas of opportunity to further optimize these resulted were noted. As such, the evaluation examined best practices for adult learning and identified areas of opportunity to effectively engage offenders in their learning plans and optimize the delivery of CSC's education programs to improve post-release outcomes and overall cost-effectiveness.

3.6 OPTIMIZING DELIVERY

Finding 6: Optimizing Delivery

Focusing on higher risk offenders with education needs and raising their education levels through the delivery of Adult Basic Education programming optimizes positive post-release outcomes and overall cost-effectiveness.

Evidence:

Higher risk offenders who spent time upgrading their education from elementary to high school levels through Adult Basic Education had the best public safety outcomes.

Delivering education programs to higher risk offenders in a way that provides opportunities to complete a greater number of achievements while encouraging positive interactions with others, had the most positive effect on post-release outcomes. The current evaluation found that higher risk offenders who spent time upgrading their education from elementary to high school levels through Adult Basic Education (ABE) programming had the best public safety outcomes. As previously discussed in the report, offenders with a need for education programming who attained a greater number of educational achievements had a higher rate of obtaining employment in the community and a lower rate of conditional release failure, particularly higher risk offenders. Given that 65% of offenders are assessed as having lower than Grade 8, and 82%

lower than Grade 10 when first admitted to federal custody (Correctional Service Canada Review Panel, 2007), higher risk offenders who transition from elementary to high school education levels demonstrate the best public safety outcomes.

The current evaluation found positive results for offenders who completed more than 10 educational achievements. Given that the maximum number of achievements attained through General Educational Development (GED) programming is 5, this program may not demonstrate outcomes as favorable as ABE programming. Furthermore, a literature review demonstrated that GED recipients may face limited employment opportunities due to their lack of non-cognitive skills such as persistence, self-esteem, self-efficacy, and their high propensity for risky behaviour (Heckman, Humphries & Mader, 2010) as it is unlikely that studying for GED tests increases socialization skills or teaches institutional norms that employers expect from high school graduates (Smith, 2003). The GED program was previously offered as part of CSC's Education Program in the Prairie and Pacific regions, however it has since been phased out. Given that the paper-based format of GED testing is currently being replaced by computer-based testing (GED Testing Service, 2014) it will be important for CSC to review the delivery of education in the Atlantic region to ensure the educational needs of offenders are being met.

Providing offenders with the opportunity to participate in Adult Basic Education programming within an environment that encourages regular and ongoing positive interactions with teachers and peers contributes to positive public safety outcomes.

Greater degrees of safety and trust have positive impacts on students' learning. As such, a safe classroom environment within a correctional setting provides offenders with a safe place to be engaged in their education programs (Loewen, 1997). Positive student-teacher relationships are important in motivating offenders to participate and complete their education programs (Loewen, 1997). These relationships are particularly important for higher risk offenders who are less cooperative and less motivated to comply with treatment demands than lower risk offenders (Bonta & Andrews, 2007). The current evaluation found that 78% offenders' interviewed (n = 187) were satisfied with the schooling offered and the teaching practices employed; 93% (n = 223) of offenders interviewed reported that their teacher motivates them to participate in their education; 92% (n = 222) indicated that their teacher was available to help them when they

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⁴⁴ The pencil and paper version of the GED[®] test will retire at the end of 2013 in the United States. On January 2, 2014 the GED[®] test will be offered exclusively on computer in all jurisdictions (except Canada).

had questions about school work; and 82% (n = 194) reported that their teacher made the course material interesting for them. When students are engaged in their work, they are more likely to participate in their education and achieve (Fredricks & McColskey, 2011; Appleton, Christenson & Furlong, 2008) resulting in enhanced public safety.

Providing offenders with the opportunity to participate in ABE programming within an environment that encourages regular and ongoing positive interactions with teachers and peers contributes to positive public safety outcomes. Both offenders and staff agreed that participating in the education program had a positive effect on soft-skills and pro-social attitudes and behaviours, including communications skills, thinking and problem solving skills, team work skills, and leadership skills.. Participating in educational programs can promote the development of knowledge, communication skills (Erinsman & Contardo, 2005), self-efficacy (Fisher, 2001) and responsibility, which in turn can change the attitudes, values and the behaviour of an individual (Jackson & Innes, 2000). Education stimulates growth and illustrates to offenders that they have the ability to control and change their behaviours which in turn facilitates their successful reintegration into the community (Jackson & Innes, 2000). The delivery of education programs is optimal in settings that facilitate the development of cognitive as well as noncognitive/social skills, however, in situations where offenders are unable to participate in programs delivered in an optimal setting, (e.g., due to security reasons, competing priorities) alternative options should be considered to ensure access to CSC's education programs (e.g., cell studies).

According to HRSDC (2008) it is important when working with adult students to ensure that program objectives are based upon individual students' needs. Active school engagement is a reliable predictor of academic success and when students are engaged in their work, they are more likely to participate in their education and achieve their educational goals (Appleton et al., 2008). In order to create an environment that is conducive to learning, teachers enhance student engagement in their learning plans and adapt their teaching practices providing additional assistance within the classroom setting to meet the varying educational needs of the offender population. The current evaluation found that staff identified various approaches to accommodate the needs of specific offenders including: tailoring course material to offenders'

needs (63%; n = 30), cultural adaptations (33%; n = 16), and using a variety of teaching styles and approaches to assist offenders within the education program (27%; n = 13).

There is a need to identify and accommodate the needs of offenders with learning disabilities.

It is necessary to identify and accommodate the needs of offenders with learning disabilities and it is CSC's policy to address these needs (CD 720⁴⁵). The current evaluation found that there are regional differences in resources and systematic procedures for identifying offenders who are at risk of having a learning disability. Often offenders do not receive a formal diagnosis, but are informally identified (e.g., by their teacher, guidance counsellor) as being at risk of having a learning disability. In most of CSC's regions, offenders with learning disabilities are integrated into mainstream ABE programs, and education staff reported accommodating the specialized education needs of these offenders through: adapting lesson plans to address individualized needs (51%; n = 52) and providing trained staff for support (21%; n = 21). However, 43% (n = 44) of staff reported that no strategies were possible due to a lack of appropriate testing or diagnostic tools, a lack of staff training, or a lack of funding.

For offenders with learning disabilities, disengagement rates are high (Dunleavy & Milton, 2009) and learning is slower, making it more important to provide individual support to these offenders in order to meet their learning objectives (Williams, Ponting, Ford, & Rudge, 2010). Special education classrooms are offered in two of CSC's institutions⁴⁶ and some advantages of having these special education classrooms reported by staff included: the ability to tailor the program to each offenders' needs (41%; n = 34), improved attitudes and behaviours within the classroom environment (39%; n = 32) and the creation of a positive environment for learning which provides opportunities for future success (13%; n = 27). As previously mentioned, providing individual support and building strong student-teacher relationships are important in delivering the education program to offenders, particularly for offenders with learning disabilities.

⁴⁵ Commissioner's Directive 720 (CSC, 2012) states that CSC is "to ensure the provision of appropriate educational interventions for offenders with special educational needs, including *potential learning disabilities*" (s.8); "approaches used in education programs will ... address the specific needs of those identified as having potential learning disabilities" (s.19); and "Individual education planning and counseling will be initiated at intake and will take into consideration the results of all educational assessments, including screening for potential learning disabilities and employment needs" (s.15).

⁴⁶ Special education classrooms are offered in Dorchester Penitentiary and Pacific Institution.

Implications:

In conclusion, identified areas of opportunity to enhance the overall effectiveness of CSC's Education Programs and Services included: targeting higher risk offenders and aiming to increase offender literacy from elementary to high school levels of education through ABE programming; encouraging regular and ongoing positive interactions within a safe learning environment that facilitates the development of cognitive as well as non-cognitive/social skills; and, accommodating the learning needs of offenders, particularly those who have learning disabilities.

Delivering education programs to higher risk offenders, in a way which provides opportunities to complete a greater number of achievements while encouraging positive interactions with others, has the most positive effect on post-release outcomes. The delivery of education programs is optimal in settings that facilitate the development of cognitive as well as non-cognitive/social skills, however, in situations where offenders are unable to participate, (e.g., due to security reasons, competing priorities) alternative options should be considered to ensure access to CSC's education programs (e.g., cell studies). The GED program was previously offered as part of CSC's Education Program in the Prairie and Pacific regions, however it has since been phased out. Given that the paper-based format of GED testing is currently being replaced by computer-based testing (GED Development Testing Service, 2014), it will be important for CSC to review the delivery of education in the Atlantic region to ensure the education needs of offenders are being met. Providing individual support and building strong student-teacher relationships are important in delivering the education program to offenders, particularly for offenders with learning disabilities.

Recommendation 1: Optimizing Delivery

In order to optimize the impact of education on post-release outcomes, CSC should target higher risk offenders, encourage regular and ongoing positive interactions in an environment that facilitates the development of cognitive as well as non-cognitive/social skills. CSC should also aim to increase offender literacy levels from elementary to high school levels of education, and identify and accommodate the needs of offenders with learning disabilities.

COMPONENT 5: INSTITUTIONAL LIBRARIES AND COMPUTER RESOURCES

The current evaluation examined the extent to which CSC's institutional libraries and computer resources meet the needs of offenders participating in an education program. Overall, the evaluation found that institutional libraries support offenders in their education program, however; opportunities for improvement were identified to enhance the quality and quantity of available library resources. Likewise, the evaluation found that computer resources and software applications available to offenders participating in CSC's Education Programs were limited. The following sections will further discuss the accessibility of library and computer resources in CSC's institutions, and opportunities for improvements to better support offenders in their education programs and facilitate their safe transition to the community.

3.7 INSTITUTIONAL LIBRARIES

Finding 7: Institutional Libraries

CSC's institutional libraries support offenders in their education program, however; the quality and quantity of library resources could be enhanced by providing reading materials that assist in addressing the education needs of offenders. Access to relevant and up-to-date reading material assists offenders in increasing their literacy level and increases opportunities for obtaining employment and successfully reintegrating into the community.

Evidence:

Supporting offenders in their educational programs by providing relevant and up-to-date resource material assists them in increasing their literacy level and opportunities for obtaining employment and successfully reintegrating into the community. CSC libraries are "information centers that support all institutional programs and address offender's needs for recreational, cultural, spiritual, educational and informative materials" (CSC, 2007a). Libraries have a positive influence on the behaviour and reintegration of offenders into the community (Lithgow & Hepworth, 1993 as cited in Curry, Wolf, Boutilier & Chan, 2003). Access to relevant and up-

to-date reading material allows inmates to feel connected to the outside world and lowers their sense of isolation and idleness (Lehmann & Locke, 2005).

Most institutional libraries provide access to hard copy and electronic resources including books, magazines, newspapers, online material (which is accessed through the librarians) and access to computers (Curry et al., 2003), however access to institutional library resources varies depending on available resources and security of the institution (e.g., some institutional libraries operate day and evening hours, while others have more controlled and limited access). CSC staff (70%, n = 92) reported that the library is accessible to offenders in education programs when required, however, 65% (n = 33) of offenders reported that the library should have more resources and should be more accessible.

Given that the majority of offenders have lower literacy levels than the Canadian population, and this evaluation found that educational programs impact positively on offender post-release outcomes, it is important for CSC to provide access to materials that will support offenders in their educational programs. Over-half (55%; n = 66) of staff and offenders (53%; n = 85) agreed that libraries have resource material to assist in educational course work, however, 32% (n = 39) of staff and 34% (n = 54) of offenders indicated that institutional libraries do not support education program. Offenders indicated a need for more up-to-date materials and increased access to resources (61%; n = 34), and access to computers and/or internet (16%; n = 9) would better support them in their education programs. Access to up-to-date books and resources assists offenders relate to subject matter and become familiar with the current community to facilitate reintegration.

One-quarter (n = 42) of offenders reported using the library to complete assignments related to education programs (25%, n = 42), while others reported using the library to use the computers (16%, n = 27). Most offenders (89%; n = 84) reported borrowing non-fiction material from the library. Of the 34% (n = 54) of offenders who indicated additional resources were needed in CSC's libraries, 55% (n = 28) reported that more non-fiction resources (e.g., dictionaries, self-help books, cookbooks, textbooks) should be available.

The current evaluation found that librarians facilitate offender access to library resources. The availability of a librarian differed between regions and institutions; however the majority of

offenders and staff reported that someone was available to assist offenders in finding library resources. In regions where library resources are limited, Social Program Officers and/or inmates assume the role of the librarian. Eighty-five percent of offenders (n = 128) and 61% of staff members (n = 79) reported that CSC librarians, contract librarians and/or inmate librarians are able to help find books and resources. A computerized circulation system, a labelling system and book return bins have been put into place in some Canadian institutions to track and manage the flow of books in and out of the library (which has decreased book loss by up to 80% in some locations (Kennedy, 2008), however, most locations still use a paper-based tracking system, making it difficult to effectively track and locate books.

A recent survey of Canadian institutional libraries warned that limited access to information, exacerbated by low literacy levels, renders inmates ill-equipped to cope with the complexities of Canada's information driven society upon release (Curry et al., 2003). A recent study in the US recognized the Colorado Department of Corrections (CDC) for their visionary library practices. CDC dedicated 10% of their library collections to materials that assist offenders in safely transitioning and reintegrating into the community (Scafuri, 2012). These materials included information on interview skills, parenting, getting a driver's license, personal finances, and eating healthy on a budget (Colorado Department of Education, 2013).

Implications:

Given that the majority of offenders have lower literacy levels than the Canadian population, and this evaluation found that educational programs impact positively on offender post-release outcomes, it is important for CSC to provide access to materials that will support offenders in their educational programs.

Next Steps:

Overall, the current evaluation found that institutional libraries support offenders in their education program, however; opportunities for improvement were identified to enhance the quality and quantity of available library resources. Particularly, staff and offenders identified a need for materials that would assist offenders in their education program and contribute to their successful reintegration into the community. In some institutions a computerized circulation and labelling systems have been implemented. Full implementation of a computerized circulation

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system is encouraged in order to facilitate the tracking and management of CSC's libraries resources, which will enhance CSC's overall capacity to educate offenders in the full use of library resources and ultimately help prepare them for their release into the community.

Recommendation 2: Institutional Libraries

CSC should ensure that the educational information needs of offenders are met through access to relevant and up-to-date reading material which supplements CSC's education program and prepares offenders for their release to the community. In addition, institutional libraries should consider ways to control the flow of books in and out of the library (e.g., electronic catalogue and circulation system) to facilitate the tracking and management of CSC's libraries resources, and to increase opportunities to educate offenders in the full use of library resources.

3.8 COMPUTER RESOURCES

Finding 8: Computer Resources

The current evaluation found that software applications and functions available to offenders participating in CSC's Education Programs are limited and are viewed by educational staff as out-dated and not meeting labor market standards. Staff indicated that computers and information technology could supplement the curriculum and provide opportunities for offenders to enhance their computer and employability skills in preparation for release.

Evidence:

Computer literacy is considered an essential skill in the community, and it is important for offenders to have access to up-to-date computer software programs as it is becoming more difficult for an individual to advance their education or their career without computer knowledge and the use of computer assisted learning. ⁴⁷ Given that increasing amounts of information is stored and accessed through the use of technology, it is becoming increasingly important to have technological skills. Human Resources and Social Development Canada (HRSDC) ⁴⁸ has classified computer use as one of their 9 Essential Skill Profiles ⁴⁹ (HRSDC, 2007) and various computer related tasks were identified to assist in obtaining and maintaining employment (e.g., typing, retrieving/sending e-mails, using word processors, creating spreadsheets, extracting data, and designing computer networks). Developing basic computer skills for those with low computer literacy through practical hands-on education using technology has resulted in increased openness to and confidence with computer technology and an increased awareness of how such skills enhance employability and career opportunities (Ktoridou & Eteokleous-Grigoriou, 2011).

In the community, technology is widely used in elementary and secondary school education. In 2006, almost all schools in Canada had computers (one computer for every five students) with

⁴⁷ As part of CSC's transformation agenda there has been an increased focus on computers in preparing offenders for employment (CSC, 2013).

⁴⁸ Human Resources and Social Development Canada is currently known as Employment and Social Development Canada.

⁴⁹ The essential skills are used in every job and at different levels of complexity to help people find and maintain employment.

95% of schools having internet connection. In the 2006 *Programme for International Student Assessment* 47% of the 15-year-olds surveyed in Canada reported using a computer often or every day at school (Council of Ministers of Education Canada, n.d.). These computers are used for word processing, research and individualized and on-line learning (Council of Ministers of Education Canada, n.d.). Since the 1990s, CSC has provided offenders access to computers in operational locations including in the school, library, gym, chapel and other locations (CSC, 2013a). Approximately half of offender interviewees⁵⁰ (49%; n = 123) reported using the computers, with 65% (n = 79) reporting using computers within the school, 32% (n = 39) within the library, and 18% (n = 22) on the range and other areas of CSC's institutions.

The current evaluation found that software applications and functions available⁵¹ to offenders participating in CSC's Education Programs are limited.⁵² Most educational staff (73%; n = 80) reported that computer software available to offenders is outdated and in most regions, floppy disks are the only means for offenders to save their work electronically.⁵³ This practice is becoming increasingly impractical as floppy disks are less available for purchase, and computers with floppy disk drives are becoming obsolete. Computers accessible to offenders provide access to basic information (e.g., their legal documents, assessments conducted by parole officers, psychologists, programs officers, CSC policies and Commissioner's Directives) and in some regions, offenders have the opportunity to participate in computer courses (e.g., learning Microsoft Office Applications). The majority of CSC staff (96%; n = 110) agreed that increasing the use of technology would improve the delivery of offender education programs as it would supplement the curriculum and increase access to programs and information (49%; n = 40),

⁵⁰ All offenders interviewed had previously or were currently participating in CSC's Education Program.

⁵¹ The availability of computer resources appears to differ between security levels (computers and other information technology resources are viewed by respondents to be more available to offenders in minimum and medium facilities than in maximum security facilities). Similarly, many CSC and contract staff working in minimum and medium security facilities agreed (respectively 81%, n = 13; and 67%, n = 33), that computer courses are available to offenders in their institutions, whereas only 38% (n = 8) of respondents working in maximum security facilities agreed.

⁵² Seventy-three percent (n = 80) of CSC and contract staff reported that computer software available to offenders is not up-to-date and does not meet labor market standards. Most computers available to offenders within CSC's education programs are out-dated and only provide access to basic software packages (e.g., Microsoft Office). ⁵³ CSC has implemented the inmate Local Area Network (LAN) in several institutions, which allows offenders to save documents on a shared drive for review and grading by teachers, however, Ontario is the only region where the inmate Local Area Network (LAN) has been installed in all nine institutions. In other regions/institutions, the LAN network has been deemed as unsuccessful due to the lack of IT support available.

provide a more engaging delivery model (37%; n = 30) as well as improve skills and employability (21%; n = 17).

CSC has implemented an inmate Local Area Network (LAN) in several institutions, which allows offenders to share applications and printers, and save documents on a shared drive for review and grading by teachers. Ontario is the only region where the LAN has been installed in all nine institutions however access to LAN varies between Ontario institutions as some serve only the offender school while others serve the entire site (e.g., school, library, gym, chapel) (CSC, 2013a). In other regions/institutions, the LAN network has been deemed as unsuccessful due to the lack of IT support available.

Implications

Given that the current evaluation found that CSC's Education Programs had a positive impact on the rate at which offenders find employment in the community, and computer literacy is considered an essential skill for obtaining employment in the community, it is important for CSC to continue to provide opportunities for offenders to develop their computer skills and keep their skills up-to-date as part of their education programming.

Next Steps:

CSC has implemented the inmate Local Area Network (LAN) in several institutions, which allows offenders to save documents on a shared drive for review and grading by teachers. Ontario is the only region where the LAN has been installed in all nine institutions. In other regions/institutions, the LAN network has been deemed as unsuccessful due to the lack of IT support available. In some regions, offenders have the opportunity to participate in computer courses (e.g., learning Microsoft Office Applications) which assists in preparing them for obtaining employment (e.g., preparing a resume) and reintegrating into the community. As part of CSC's transformation agenda there has been an increased focus on computers in preparing offenders for employment. This endeavour seeks to provide offenders with opportunities to gain computer skills needed for seeking and maintaining employment in the community.

Recommendation 3: Computer Resources

CSC should consider supplementing educational program material with electronic resources to capitalize on the benefits of computer-assisted learning which will provide opportunities for offenders to gain computer skills needed for increasing literacy levels.

COMPONENT 6: REPORTING OF EDUCATIONAL DATA IN OMS

An accurate portrayal of the need for a program, and program impacts are important to ensure that financial and human resources are appropriately allocated. Despite recent improvements to the OMS infrastructure and the development of a national guide for entering educational data, some educational variables in OMS are still used inconsistently, or not used at all.

As offenders progress through an education program, information relating to their progress is captured in the Offender Management System (OMS), Ministry of Education software applications, institutional education and training files, teacher files and student achievement records. In particular, information is recorded in OMS to track offenders' initial education level (i.e., documented level or functional level), any subsequent assessments (e.g., the current education level), any referrals for and assignments to education programs, and the status of these assignments (e.g., successful, incomplete, temporarily reassigned, assignment transferred, currently assigned). Specific education course completions and certificates/diplomas earned for completed educational programs should also be recorded in OMS.

Historically there have been significant data quality issues with educational data captured in OMS, namely in the areas of educational assessments, educational enrolments and educational certificates. Since 2007, the OMS infrastructure for reporting information has been improved and the *National Offender Management System Procedures for Education Programs manual* was developed to provide clear direction on how educational program data are to be recorded within OMS (CSC, 2012). The current evaluation found that although educational data reporting has improved significantly, a number of limitations related to technical issues within OMS and regional differences in data reporting still exist. In addition, the number of educational assistants/clerks, and the roles and responsibilities of staff members entering educational data varied in each region impacting their ability to enter data in a timely and consistent manner.

3.9 EDUCATIONAL DATA REPORTING

Finding 9: Educational Data Reporting

Data limitations make it difficult for the timely and accurate reporting of education program outcomes for offenders. Despite recent infrastructure improvements and the development of a national guide for entering educational data, information is still entered inconsistently or not at all in CSC's Offender Management System.

Evidence:

Program Outcomes

Despite current data gaps, the current evaluation conducted an analysis of the effectiveness of education programs using the level of program participation and the number of educational achievements (i.e., credits, courses, or modules) completed to analyze outcomes. Specifically, the following issues were identified and mitigated by the current evaluation:

a) Initial Educational Assessments and Referrals

Through an exploration of the data available in OMS relating to the educational assessments, the evaluation team determined that functional assessments, as well as documented assessments are recorded in OMS; however, other specific placement tests conducted by staff working in CSC's schools are not systematically tracked in OMS. Through site visit consultations, the evaluation team determined that the use of assignments and the process of determining the appropriate education level to assign an offender differ by region, institution and the level of expertise of the staff members. In addition, due to a technical issue in OMS, staff members are not able to finalize assessments if text is not added in the textbox provided. As a result, many of the educational assessments in OMS are flagged as non-finalized⁵⁴. For these reasons it was difficult to determine if educational assessments were an accurate reflection of offender level of education. As such, the evaluation used educational need flag which was identified as part of the Offender Intake Assessment (OIA) to determine if the offender had a need for education programming.

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⁵⁴ Through consultations with Reintegration Programs Division (RPD), the evaluation team determined that a request has been made to correct this issue within OMS.

b) Managing Education Program Schedules and Dosage

The Education Programs: National Offender Management System (OMS) Procedures guide specifies that offender program schedules are to be managed and information identifying offenders' level of classroom participation (e.g. full-time, part-time AM, part-time PM) and level of education (e.g., ABE I, II, III, IV) should be captured in OMS; however these are not systematically recorded in OMS. Education is an ongoing program, so offenders can come in and out of the program during their time in the institution, depending on their programming needs. This information is captured differently between regions. In some regions, inmates may begin an education program but are taken from the class to participate in other programs (e.g., a correctional program) keeping their place in the education program until they return. In these cases the offender's educational assignment status remained as "assigned" even though the offender was not currently participating in an education program at that time. In other cases, an offender's status is changed in OMS to "temporarily reassigned" and then overwritten to "assigned" when they return. In both of these cases, the time away from the education program is not tracked in OMS. As a result, it is very difficult to accurately determine the amount of time an offender spent in an education program (i.e., dosage). As an alternative, the current evaluation used program completions and the number of completed educational achievements to estimate program exposure.

c) Assignment Statuses

Although the Education Programs: *National Offender Management System (OMS) Procedures* manual indicates that once an offender has successfully completed an education program, the assignment status for the enrolment must be updated from 'assigned' to 'successful completion', differences exist in the way assignment statuses are recorded resulting in a variation in the frequency with which assignments are updated in OMS. For example, one region reported previously using the 'assignment transferred' status instead of 'successful completion' when offenders complete a level of ABE programming and progress to the next level. This suggests that there is a variation in the understanding, application and recording of assignment statuses in OMS. These differences may result in inaccurate reporting of ABE levels or education program completions.

d) Course completions

Although the *Education Programs: National Offender Management System (OMS) Procedures* manual indicates that successfully completed courses must be entered in the educational achievement screen in OMS, regional Ministry of Education differences in curricula make it difficult to compare the number of completions for each offender. Through regional consultations, the evaluation team determined that educational achievements within offender files in OMS do not always indicate the completion of a full course, but could also indicate the completion of a module, and/or credits granted for prior learning, work experience, and participation in correctional and vocational programs (Prior Learning Assessment and Recognition). As part of the current evaluation, all education achievements on file were used. The evaluation did not distinguish between the different types of educational achievements that could be entered in OMS.

e) Current functioning level

When used correctly, the current level of education functioning of an offender, can provide a current snapshot of each offender's educational level and indicate progress made to date. The *Education Programs: National Offender Management System (OMS) Procedures* manual indicates that the current functioning level of offender is to be entered in the education assessment screen each time an offender completes an ABE level, GED or post secondary level of education, however the current level of functioning variable in OMS does not appear to be used consistently between regions or institutions. In order to mitigate this limitation, the last education program level completion was used.

Challenges with OMS Data Entry

The current evaluation found that a number of factors, including staff roles and responsibilities, affected the timely entry of educational data in OMS. Specifically, the number of educational assistants/clerks, and the roles and responsibilities of staff members entering educational data varied in each region impacting their ability to enter data in a timely manner. Timely data entry is important for assessing and reporting on outcomes. Almost all (91%, n = 101) questionnaire respondents reported receiving formal or informal training on how to enter education data into OMS; however, time constraints (78%, n = 69), uncertainty on how to enter data into OMS (21%; n = 18), resources constraints (e.g., lack of available computers) (18%; n = 16), OMS

screens that are not designed to capture educational data (10%; n = 9) and "other" (14%, n = 12) were identified as factors impacting the timely entry of data in OMS.

Learning Disabilities

In order for CSC to meet the educational needs of all offenders, it is important to have systematic procedures in place and a clear understanding of the roles and responsibilities for the assessment of learning disabilities. The assessment and diagnosis of learning disabilities enhances CSC's ability to accommodate the educational needs of these offenders by adapting teaching approaches accordingly, hence maximizing the overall student learning experience. Through regional site visits and consultations, the current evaluation found that there are regional differences in resources and systematic procedures for identifying, diagnosing and tracking learning disabilities. Therefore, the evaluation team was not able to report on the proportion of offenders in the sample who were identified as having a learning disability. Therefore, this important potential confounding factor was not taken into account in outcome analyses.⁵⁵

Implications:

Despite recent improvements in the OMS infrastructure for data reporting and the development of the *Education Programs: National Offender Management System (OMS) Procedures* manual for education programs, regional inconsistencies in data reporting still exist. Many educational variables in OMS are used inconsistently, or not used at all in some institutions. As such, there were a number of quantitative limitations to the current evaluation which were mitigated using a mixed-method approach to triangulate information gathered from OMS, national, regional and site consultations, and staff and offender interviews to contextualize results and formulate findings and recommendations.

If educational program data are not reported in a timely, accurate and consistent manner, CSC's regions are not able to provide an accurate portrayal of needs, enrolments, and completions, increasing the risk that financial and human resources will not be appropriately allocated to CSC's educational programs. This would have a direct impact on CSC's ability to increase

⁵⁵ Learning disabilities/difficulties can have a significant impact on offenders' responsivity and progress in education programs.

offenders' literacy levels as well as the ability for offenders to find and maintain employment and successfully reintegrate into the community.

In addition, learning disability indicators have been included within the Dynamic Factor Indicator Analysis (DFIA), and some regions conduct learning disability assessments where a learning disability is suspected; however, given the large amount of missing information and the lack of guidelines for conducting learning disability assessments, there is a risk that offenders with learning disabilities are not identified, impacting their participation and other students' participation in education programs.

Next Steps:

CSC has made recent improvements to the OMS infrastructure and the development of a national guide for entering educational data. CSC should continue to improve OMS data entry for offender education programs given that timely, accurate and consistent data assists CSC in providing offenders with the necessary resources to improve their literacy levels resulting in positive outcomes.

Recommendation 4: Educational Data Reporting

CSC should enhance the timeliness of educational data reporting and ensure that the National OMS procedures are followed when entering educational data into OMS. In addition, CSC should clarify the roles and responsibilities for the assessment of learning disabilities to meet the educational needs of these offenders.

4.0 CONCLUSION

In conclusion, three-quarters of offenders have a need for educational programming and the current evaluation found that educational programs have a positive effect on post-release outcomes, specifically for medium and high risk offenders. These positive impacts contributed to overall improved public safety, as well as decreased financial burdens on CSC, its public safety partners and Canadians. In addition, several areas of opportunity were identified by the current evaluation to further optimize the outcomes and cost-effectiveness of CSC's offender education programs and services.

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APPENDICES

APPENDIX A: EDUCATION LOGIC MODEL

