

# INTENSIVE LEARNING CENTRE BUILDING EVALUATION

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Mid North Coast Correctional Centre

This project is a collaboration between Corrective Services NSW (CSNSW) and the Designing Out Crime (DOC) research centre at the University of Technology Sydney (UTS).

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# Executive Summary

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## 1.1 Overview

This building evaluation assesses the performance and quality of the Intensive Learning Centre (ILC) at Mid-North Coast Correctional Centre (MNCCC) as a space for intensive 21st century learning in a maximum-security prison. The MNCCC Intensive Learning Centre is an education facility consisting of four classrooms, a library, amenity area, staff office and landscaped grounds including multi-level timber decking, a yarn circle, walking track and gardens. Most of the furniture and buildings were constructed by Correctional Service Industries. It is designed to operate with forty inmate learners, five educators, a correctional officer and an education manager. This report focuses on the evaluation of the ILC facility against relevant functional performance criteria and the original design intentions, with recommendations for the design of the current and future Intensive Learning Centre facilities. We include summaries of the assessment of technical and process performance as appendices.

A staged mixed methods approach was used to evaluate the MNCCC Intensive Learning Centre where for each user group we first administered a survey, followed by a walk-through interview, and then a focus group with a sub-sample of users. Participants in the research included inmate learners, educators, correctional staff and managers involved in the operation of the MNCCC Intensive Learning Centre during its first year of operation.

Overall building users' responses and reported experiences of the ILC facility were positive, although participants also identified contentious aspects and aspects of the facility that were not working well.

In terms of what is working well about the design of the facility, inmate learners, educators and correctional staff all clearly indicated;

- the design supported the learning and therapeutic aspirations of the program. This is a critical finding as it represents a key intention and objective of CSNSW in the brief for the facility
- key environmental conditions (lighting, temperature, acoustics, ventilation) and aesthetics of the classroom resulted in a comfortable and positive classroom space
- the Smart-board technology's value in creating opportunities for learning and engagement
- the deck area and gardens create a relaxed, sensory space differentiated from the rest of the prison

Contentious aspects of the facility design and construction included the design of the learner desks and the build quality and value. The large majority of learners strongly liked the unique design of the desks, while the educators questioned their functionality in terms of configuration options. Educators also raised more issues and criticisms with the quality of the construction and design of the facility.

A number of aspects of the facility were also identified by learners and educators as not working well including:

- lack of outdoor seating with shade impacting on the capacity to use outdoor spaces for education, community and interpersonal activities
- small group rooms within classrooms are rarely used as a space for educational activities
- use of general purpose classroom as a dedicated computer room is problematic for the computer classes but also means each group does not have a home classroom
- the staff office size and configuration does not efficiently support the number of staff or all the functions for an educator office

Some of these issues have arisen due to aspects of the initial design not yet being implemented (shade sail) or operational changes to that specific in the original design brief (staff numbers)

We provide 10 key recommendations for consideration for the MNCCC Intensive Learning Centre and identify a range of learnings from the existing facility to inform future Intensive Learning Centre facilities based on this prototype

## 1. introduction

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# 1. introduction

## 1.1 Overview

The purpose of this building evaluation is to assess the performance and quality of the Intensive Learning Centre (ILC) at Mid-North Coast Correctional Centre (MNCCC) as a space for intensive 21<sup>st</sup> century learning in a maximum-security prison. Opened in April 2014, the Intensive Learning Centre at MNCCC represents a prototype facility where the design intention was to purposefully support the goals of the Intensive Learning Centre program. This new approach seeks to improve upon current practice where most other Intensive Learning Centre programs in NSW prisons use traditional correctional education facilities or adapted vocational industry spaces. This evaluation will provide Corrective Services NSW with robust information on the performance, quality and potential value of the Intensive Learning Centre prototype that may inform future design and planning of Intensive Learning Centre educational environments within NSW prisons.

### Objectives

Three core objectives drive this evaluation:

- Assess the functional, technical and process performance of the Intensive Learning Centre (ILC) prototype project
- Provide recommendations to improve the design of the ILC at MNCCC, and to improve the design and delivery process for future ILC facilities
- Develop an initial, qualitative assessment of the value of the ILC prototype

### Scope

This evaluation uses a single case study design to assess the performance and quality of the Intensive Learning Centre as a place for learning. Surveys, interviews and focus groups are used to obtain the views of educators, ILC inmate learners, ILC correctional officers and CS management. Technical building assessment tools and expert assessments were also conducted. The evaluation assesses the design and construction of the building modules, furnishing and landscaping in use. Comment will be made about the ILC program where it interacts with the performance of the building.

This evaluation does not include an assessment of project costs or an associated cost-benefit analysis. Nor does the evaluation include a detailed impact evaluation or comparisons with other NSW ILC programs that use traditional education facilities. While the scope includes recommendations, it does not provide detailed design concepts related to any of the recommendations.

### Report focus and structure

This report is structured around five sections with the focus of the main body of the report being the evaluation of functional performance and the design intentions. The evaluation of the technical performance and the process performance are reported in separate sub-documents in Appendices a.3, a.4, a.5 and a.6. We have organised the report in this way as the functional and design intention aspects of the evaluation are of primary interest to most stakeholders, with the technical and process evaluation more relevant to specific audiences in the organisation.

Due to the breadth of information collected in the functional performance assessment the report includes both a section reporting the general research findings as well as assessment relating to the specific research questions.

#### INTRODUCTION

Background to the ILC program and the brief, design and program at the MNCCC ILC. We also provide some background on building evaluation research and review some of the literature relevant to the current study.

#### METHODOLOGY - FUNCTIONAL PERFORMANCE

Outline the evaluation framework for the research, identify the research questions, describe the research methods and discuss any methodological considerations.

#### RESEARCH FINDINGS

Presentation of the general findings obtained using the main research tools in this study.

#### FACILITY ASSESSMENT

An analysis and assessment on the findings with respect to each research question and the associated hypotheses.

#### RECOMMENDATIONS

The design recommendations stemming from the research for the MNCCC ILC, as well as future ILC facilities.

#### APPENDED SUB-DOCUMENTS

- a.1 Process Performance - Building
- a.2 Technical Performance - Building
- a.3 Process Performance - Furniture
- a.4 Technical Performance - Furniture

Assess the performance and quality of ILC facility at Mid-North Coast Correctional Centre (MNCCC) as a space for intensive 21<sup>st</sup> century learning in maximum-security prison.

Project Purpose

# 1. introduction

## 1.2 Context

### Intensive Learning Centres in NSW Correctional facilities

The purpose of the ILC is to provide inmate learners with the opportunity for intensive, full time 21<sup>st</sup> century educational experience in custody. The focus is on supporting the development of skills in literacy, numeracy, communication, Information Computer Technology and also vocational skills (such as small motors, horticulture etc.). The goal is to provide a supported, 'therapeutic' environment where intense, full-time collaborative learning takes place and ample opportunities for accreditation exist so that learners achieve a full Certificate qualification at levels I, II or III in 6-8 months. It is intended to prioritize young male adult offenders (aged 18-25) as the learning cohort (MacGregor, 2012).

The Corrective Services NSW "Statement of Purpose: Intensive Learning Centres" (CSNSW, 2012, TRIM: D12/420155) clearly outlines the objectives and intended characteristics of ILC programs. We provide the statement in Appendix a.1 with some relevant excerpts below:

#### Criteria for ILC participation

- A minimum of 6 months before EPRD to complete a Certificate course 2
- Where possible, young adult offenders (YAO) should have a minimum of 12 months before EDR to participate in further stages of the YAO program once the ILC program is completed.
- Assessment of need is determined as an Australian Core Skills score of 3 or below and a medium to high level of risk in the Education and Employment domains of the LSI-R.
- A type of placement hold will be put on offender learners engaged in the Intensive Learning Program for the duration of the program to ensure courses can be completed

#### Program design, delivery and resources

##### Program

- Each Intensive Learning Program should respond to the learning needs of those within the correctional centre. A well-planned menu of educational programs at various certificate levels should be planned.
- The program is to be based on Certificate1 Introduction, Certificate I & Certificate II in the Access Employment, Education and Training Framework (AEET), with clear progression routes to Certificate III and/or Tertiary Preparation Program as appropriate.
- Appropriate vocational units from courses on the AEVTI scope and/or TAFENSW are to be integrated into each Intensive Learning program.

##### Schedule

- The ILC should operate separately from other education and program facilities in the centre, be the offender learner's primary work area and, wherever possible, all other programs should be accessed outside of ILC hours.
- The Intensive Learning Program should be scheduled as full time to maximise Certificate completion within a 6 month time frame.
- A minimum of 4 hours per day should be spent in formal lessons in the ILC. Operations at the centre may need to be modified to enable this.

##### Delivery

- The Intensive Learning Program should be customised to meet the learning need/s of each particular class and the individual learners within that class.
- Adult education principles including a learner-centred inquiry-based approach should be applied.
- Sufficient resources are to be allocated to the ILC to support course delivery and foster independent study and research.
- The goal of the program is not only to improve key learning and employability skills, but to ensure each student graduates with a Certificate that has currency in the community.

##### Staffing

- Teachers are to be assigned to each group for the duration of the program to build rapport with their learners, develop a collegiate approach to course delivery and support case planning and management.
- A Correctional Education Officer is to be assigned to each ILC to administer the program, including selection of students, allocation to groups, review learners' progress and to plan post-program pathways to further education and employment.

##### Incentives

- Offenders are to be given learning incentives acknowledging effort and progress through an incremental pay scale matched to industry pay scale.
- Learning achievements are to be acknowledged through a graduation or similar event which include invitations to family and friends.

The focus [of the ILC program] is on supporting the development of skills in literacy, numeracy, communication, Information Computer Technology and also vocational skills.

The goal [of the ILC program] is to provide a supported, 'therapeutic' environment where intense, full-time collaborative learning takes place and ample opportunities for [formal] accreditation exist.

# 1. introduction

## 1.3 Brief

### Brief for Mid-North Coast CC Intensive Learning Centre

The ILC Design Brief (McGregor, 2012) is a visionary document that articulates the broad design intentions and requirements for the ILC. An excerpt from the brief is provided here with the full document in appendix a.2.

“We need our Intensive Learning centre to not look like traditional school. We need it to be the sort of place that will foster 21st century learning skills that have been identified as desirable by employers such as:

- Creativity
- Critical thinking
- Communication
- ICT literacy
- Citizenship
- Personal and social responsibility
- Problem solving
- Decision making

In many ways this is antithetical to the regime of containment and security of a prison, however it fits in perfectly with the focus on rehabilitation and through care. We need these young men to feel engaged with their space, their teachers and each other. We need them to want to come every day and be excited to learn. We also need the staff to be excited to work in this environment and to think creatively about providing integrated learning experiences rather than teaching literacy/numeracy discretely.

We need learners to feel connected with their families and wider communities to promote citizenship.

We need them to feel safe to learn. We need them to feel empowered and encourage them to take ownership of their learning.

We need their learning spaces to support this. We need them to be dynamic and agile – to be flexible and easily changed as the activity requires.

We don't believe a 21<sup>st</sup> century learning space has been built within a maximum security prison anywhere in the world, with the possible exception of Norway.”

### Basic Requirements

In addition to the themes, values and learning opportunities embedded into ILC centres, the design brief articulated a list of basic amenity requirements for learning spaces in the ILC. These requirements, listed below, provided an important basis for the development of the design concepts.

1. Four classrooms – interactive whiteboards in at least 2 classrooms, with flexible walls between classrooms to allow Interactive White Boards(IWB) to be shared. Rooms need to be as large as possible, to fit at least 10 large adult learners. They should have internet connectivity for IWB. One of the classes should have cabling for IWB development – either via 10 desktop pcs or ports for 10 laptops/tablets.
2. One learning enrichment space – a communal multipurpose area for learning resources, some ILC facility, class space and peaceful space for learners. This area could possibly be used by learners at lunchtimes.
3. Learner toilets
4. Staff toilets
5. Interview room
6. Education officer office
7. Staff work room (for 4 teachers – with internet connectivity, pcs/laptops/ phones)
8. Staff meals area – with small kitchenette, microwave, fridge, kettle etc.
9. Learner meals/tea/coffee point – microwave, hot water for tea/coffee, fridge.
10. Outdoor space that can be used at lunchtimes or as learning areas
11. Excellent ventilation
12. Excellent natural light
13. More money spent on fixtures and furniture perhaps than the building, which may be more determined by security requirements such as straight lines of sight.
14. Space that can be easily reconfigured to be open, provide more quiet areas, be multipurpose and used for multiple purposes at the same time.
15. Flexible, comfortable furniture.
16. Library facilities accessible by inmates off the “main circle”.

“We need these young men to feel engaged with their space, their teachers and each other. We need them to want to come every day and be excited to learn. We also need the staff to be excited to work in this environment and to think creatively about providing integrated learning experiences rather than teaching literacy/numeracy discretely.”

McGregor 2012



# 1. introduction

## 1.4 Site location and layout

### MNCCC Location

The MNCCC is located approximately 11km west of Kempsey on the mid north coast of NSW. The MNCCC is situated in an agricultural area and adjacent to the local airport. The ILC is an addition to the existing MNCCC infrastructure. The ILC is sited between the residential and exercise yards of Pods A and Pod B. ILC students are solely housed in Pod A with the entrance to the Centre from Pod A exercise yard.



### ILC Site

The ILC buildings were prefabricated by St Heliers Correctional Centre, transported to site by truck, and sited on piers. The buildings are connected by an elevated deck, providing common areas between the classrooms, office, and amenities. Circulation around the perimeter of the ILC was realized by setback requirements from the ILC fences. These setbacks provided an opportunity for a walking track, interspersed with plantings, aligning with the objectives of the design to provide a unique space for learning.

### ILC Architecture

The architecture of the ILC is driven by the scale of possible learner/teacher interactions. The design includes spaces for quiet, focused work, one on one learning, small group work, class work, inside and outside teaching, peer learning (chewing the fat), combined class groups, indigenous learning delivery, and whole of ILC gatherings in the central space.

### ILC Components

- The ILC facility consists of:
- Two separate classrooms
- Two joined classrooms
- A library that is available to the rest of the MNCC on the weekends
- An office for four teaching staff and one overseer
- An amenities unit that has toilets, and kitchen facilities.

### Facility Layout

The ILC is located between A Pod and B Pod. The sting of the library (far right building) provides services to the ILC during the week whilst offering weekend access to the rest of the prison.





# 1. introduction

## 1.5 ILC spaces

The following photographs present various spaces through the ILC facility.



CLASSROOM INTERIOR



SEATING AND KITCHEN/TOILET BLOCK



STAFF OFFICE



GARDEN AND LIBRARY



BREEZEWAY



OUTDOOR BENCH AREA



# 1. introduction

## 1.6 ILC furniture

The following photographs present various examples of furniture purpose built for the ILC facility.



MULTI USE TABLES



SOFT SEATING



YARN CIRCLE



WORKING WALL



MEETING TABLE



EDUCATOR DRAWERS

# 1. introduction

## 1.3 Background to building evaluation

Building evaluation research, also known as post-occupancy evaluation, emerged in 1960s and 1970s out of a growing recognition that buildings should ultimately be designed and perform to support the needs and requirements of building users (Sommer, 1972). In academia, this included architects reflecting on design practice (Marcus, 1986; Rapoport, 1970), groups in psychology and sociology interested in the impact of designed environments on people (Altman, 1975; Gans, 1977), and researchers in the developing field of facility management where building performance is a key concern (Preiser, 1989).

In practice, a major driver for post occupancy evaluation was its relevance to large organisations who were commissioning multiple new buildings. In addition to being costly to design and construct, for large organisations buildings were identified as having long lasting effects on the wellbeing and productivity of their employees. New buildings, however, were rarely being assessed against even basic outcomes. As a result, new facilities with major problems often quickly became the design and construction precedent for future projects. This need among practitioners coupled with the academic interest provided the impetus for the development of building evaluation research field.

In this context, building evaluation was developed as an applied research approach for investigating the experiences of building users to evaluate building performance (Zimring & Reizenstein, 1980). Due to the diverse nature of building design, operation and use within organisations, building evaluation research has an interdisciplinary base with the fields of environmental psychology and environment-behaviour studies integral to the development of methods to assess user needs, perceptions and experiences (Zimring & Reizenstein, 1980). More so than other social science research, however, is the integration of POE research with practice. This integration with practice is highlighted in Preiser and Nasar's (2008) performance model for POE shown in Figure 1. Explicit feedback and feed forward processes are identified for the improvement of the current facility (short term), the building of future similar facilities (medium term) as well as contributing to broader knowledge on building design criteria and performance (longer term feed-forward).

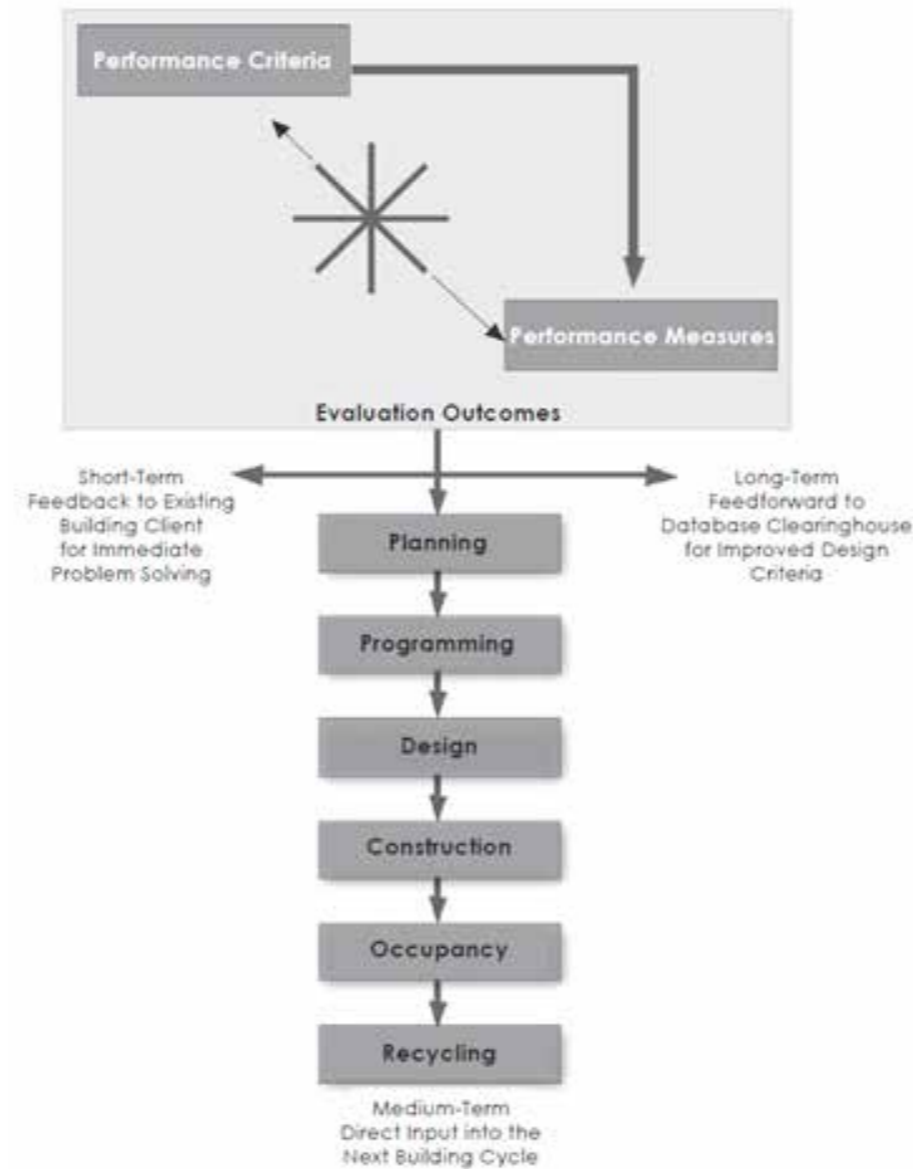


Figure1: The Performance Concept in the Building Process (Preiser & Nasar, 2008)

While building evaluation is not highly visible to those outside the building services and related disciplines, a relatively large academic and practice community has developed around post-occupancy evaluation in the last 25 years. There are now a number of propriety POE methodologies, many based within academic institutions, such as PROBE(Cohen, Standeven, Bordass, & Leaman, 2001), BUS (Leaman, Stevenson, & Bordass, 2010), BOSSA (Candido, de Dear, Thomas, Kim, & Parkinson, 2013) and DQM(Cook, 2008). High ranking journals including the 'Journal of Environmental Psychology', 'Environment and Behaviour', 'Facilities' and the 'Journal of Building Survey, Appraisal & Valuation' regularly publishe articles related to the development and practice of POE. Within Australia, an Internet search will identify that most Australian state government jurisdictions have guidelines and policies around the use of post-occupancy evaluation in many major government building projects.

## 2. methodology

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## 2. methodology

In this study in this section we provide the rationale and description of the methodology used. This include discussion of the following:

- the evaluation frameworks
- the research questions
- the research methods; and
- methodological considerations.

### 2.1 Evaluation frameworks

Two frameworks are used to guide and structure this evaluation. The first is a building performance framework and the second framework (the Design Intention Framework) draws on the key design intentions developed through the design briefing process.

#### Building performance

To develop the research methodology for the performance review, a review of the relevant research and practice literature was undertaken. A number of frameworks exist for structuring POE studies, with some frameworks having narrow focuses on particular issues (i.e. comfort and sustainability) or contexts (i.e. medical facilities, corporate offices). In the current study we required a framework that captured the broad range of design, construction and operational issues relevant to educational facilities.

While there are some propriety frameworks for the evaluation of education facilities, a broad and well recognized framework for education contexts is the one articulated in the AUDE Guide to Post Occupancy Evaluation in higher education facilities (Blyth, Gilby, & Barlex, 2006). It was developed in the United Kingdom through collaboration between industry, academic and government institutions. It provides a comprehensive framework and associated tools for planning and implementing a POE within an education environment (Cleveland & Fisher, 2014; Riley, Kokkarinen, & Pitt, 2010). This performance framework is used in this study to structure the evaluation in terms of functional, technical and process performance as well as identifying many of the fundamental performance components within each category.

For functional performance the components included responsiveness to program, space, image, comfort, serviceability and operational management. We then transformed these three performance categories into research questions and the associated criteria into hypothesis for assessment.

<p><b>Functional performance</b></p> <ul style="list-style-type: none"> <li>• Responsiveness to therapeutic learning program</li> <li>• Image – look feel of facility</li> <li>• Space - Size, relationships, adaptability</li> <li>• Comfort - lighting, temperature, ventilation, noise, user control</li> <li>• Serviceability – cleaning, maintenance, security</li> <li>• Operational management – as learning space, as secure space</li> </ul>
<p><b>Technical performance</b></p> <ul style="list-style-type: none"> <li>• Physical systems (lighting, heating, ventilation, acoustics)</li> <li>• Environmental systems (energy consumption, water consumption, CO output)</li> <li>• Adaptability – Ability to accommodate change</li> <li>• Robustness &amp; quality</li> </ul>
<p><b>Process</b></p> <ul style="list-style-type: none"> <li>• Briefing</li> <li>• Procurement – team selection, contractual process</li> <li>• Design</li> <li>• Construction - delivery</li> <li>• Commissioning</li> <li>• Occupation – managing the building</li> </ul>

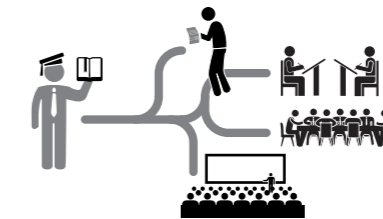
Performance Framework (Blythe et al, 2006)

#### Design Intention Framework

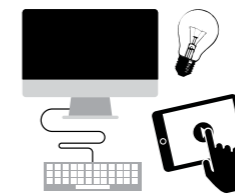
Various spaces and features within the MNCCC ILC were designed in response to key objectives established in the project brief and early concept development. The POE distilled these objectives into four key design intentions which were utilised as additional lenses to assess the design's functional performance.



- *Feels different to the rest of the prison: a safe, motivating and productive place of learning: encouraging inmates to adopt the role of a learner*



- *Enables learning communities to establish at various scales: individual, group, class and ILC wide interaction*



- *Utilised 21st century learning technology and approaches: offering a stimulated learning experience akin with contemporary teaching practice*



- *Offered opportunity to engage in both passive and active learning through a range of formal and informal activities: encouraging social and cultural growth, project based learning and respite for learners*



## 2. methodology

### 2.2 Research questions

In this section we articulate the research questions and related hypothesis/performance statements for each of the four aspects of the evaluation (functional, technical and process performance, and design intentions). For the design intentions aspect we only state research questions as it involves a more reflective analysis approach. Drawing on the findings, these research questions and statements are used as the basis on which to make assessments about ILC facility in Section 4

#### Functional performance

Drawing on the POE and related literature on educational facilities and correctional institutions (Day, Casey, Vess, & Huisy, 2012; Hanna, David, & Francisco, 2010; Riley et al., 2010; Watson, 2005; Wener, 2012; Wener, Frazier, & Farbstein, 1985), a key research question and related hypotheses are articulated to structure the functional performance evaluation of the Intensive Learning Centre. The key research question is:

**“Does the ILC facility meet the functional needs and requirements of educators, inmate learners and custodial staff?”**

Seven hypotheses are articulated as a basis for examining the data against the main components of functional performance. Provided in Table 1, page 6 is the mapping of each hypothesis to the methods (and specific items where relevant) used to collect data relevant to testing the hypothesis.

1. Most building users perceive the design of ILC improves and supports their learning/teaching and well-being (responsiveness to program)
2. Most building users perceive the ILC design as welcoming and attractive (image)
3. Most building users agree with the amount, variety and quality of indoor/outdoor space (space)
4. Most building users experience the environmental conditions (lighting, temperature, ventilation, noise, user control) as comfortable (comfort)
5. Most building users experience being and feeling safe (operational management/ safety)
6. Most building users perceive the ILC building as well maintained (serviceability)
7. Most building users report that the ILC design supports the educational and security operational goals (operational management)

#### Design Intentions

Drawing on the objectives of the ILC brief, stakeholder consultation as well as broader literature on 21st Century learning (www.heppell.net), Aboriginal pedagogy {Yunkaporta, 2009 #177}, and Therapeutic Community model {De Leon, 2000 #3}. A range of research questions and related hypotheses are articulated to structure the evaluation of design intentions.

**“Does the ILC Feel different to the rest of the prison?”**

**“Does the ILC enable learning communities to establish as various scales?”**

**“Does the ILC accommodate the use of 21st Century learning technology and approaches?”**

**“Does the ILC facility offer opportunity to engage in both passive and active learning through a range of formal and informal activities?”**

## 2. methodology

### 2.3 Methods

The methods used to collect information for assessing the functional, technical and process performance, and the design intentions, is detailed in this section.

#### Functional Performance

While there is a diversity of research approaches used to investigate functional performance, a mixed method approach where standardised user surveys are employed in conjunction with qualitative interviews, walk through methods and/or focus groups is generally advocated (Clements-Croome, 2013; Vischer, 2002; Zimring & Reizenstein, 1980). The user surveys have the purpose of assessing people's experience of the building-in-use in relation to functional performance criteria. They commonly require user ratings on issues such as comfort, space, image, amenity, maintenance and perceived impact (Vischer, 2002). Users' survey ratings for a particular facility can be compared with data for similar facilities through the use of standardized measures (Leaman & Bordass, 2001). Qualitative interviews and walkthrough methods are used to further explore the particular design and operational features underlying problems or strengths of the building (Watson, 2005; Zeisel, 1984). Focus groups are then used to validate and develop a collective understanding of the issues and engage in initial problem solving processes with the user groups (Leaman et al., 2010).

In this research a staged mixed methods approach is used so that for each user group we first administer the survey, followed by the walkthrough & interview with a sub-sample of users, and then lastly the focus group with another sub-sample of users. This staged approach enables us to identify issues and strengths in the earlier methods and then explore them in more depth in the later qualitative methods. Where sub-samples of participants are required, recruitment was guided by a randomized list of potential participants. We know describe the each method used for the functional performance evaluation.

Participant category	Task	Participants	Approx. Time
Inmate Learners	Survey	33	45 mins
	Walkthrough Interview	10	30 mins
	Focus group	7	1 hr
	Learner form	12	30 mins
ILC educators & overseers	Survey	5	30 mins
	Walkthrough Interview	8	30 mins
	Focus group	8	1 hr
MNCCC maintenance staff	Interview	1	30 mins
MNCCC management	Interview	4	30 mins

#### Response Participation Results

**USER SURVEYS:** As previously discussed there are a range of frameworks, methods and tools developed for post-occupancy evaluation research. While we use the AUDE framework to broadly structure our evaluation, the AUDE survey tool is very generic and focused more towards higher learning environments. For this study we required a survey tool that was applicable to smaller scale learning environments, could be administered to inmates learners and staff as well as being relevant to the innovative education practice intended for the ILC. We also required a tool that could assess the therapeutic aspect of the ILC program in a correctional context.

**EQES TEACHER AND LEARNER SURVEYS:** After an extensive search of the literature and contact with experts in the field, POE survey tools were identified for evaluating innovative learning environments called the 'Evaluation of the Quality of Educational Spaces (EQES)'. The EQES was developed by the Organisation for Economic Co-operation and Development's (OECD) international program on "Innovation in Education: Evaluating quality in educational environments". The teacher and learner surveys were part of a larger package of tools developed through collaboration with experts from over 20 different countries and subsequently piloted in six of countries. These surveys include all the standard user survey items included in other POE instruments as well as questions specific to innovative learning spaces. Only minor changes were required to less than 10% of questions to ensure the survey was relevant and not confusing in the correctional context. With the majority of questions remaining unchanged, it will be possible to compare the ILC survey results with the results of other learning environment where the EQES has been used. The adapted versions of the teacher and inmate learner EQES surveys are provided in attachments 1 and 2.

**ESSEN SOCIAL CLIMATE EVALUATION SCHEMA FOR PRISONS:** To assess and develop an understanding of how ILC performed in relation to the therapeutic community aspect of the program, we identified the Essen Social Climate Evaluation Schema for prisons as a survey tool designed to assess therapeutic social climate in prisons (Schalast, Redies, Collins, Stacey, & Howells, 2008). Original designed to assess social climate in secure psychiatric facilities measuring the core dimensions of 'safety', 'therapeutic hold' and 'inmate cohesion and mutual support', it was adapted for general prison populations with the same three dimensions validated (Tonkin et al., 2012). It has been validated for Australian prison populations and used in a number of jurisdictions (Day et al., 2012). For this ILC evaluation, this schema has value as a brief instrument that asks validated questions about safety, therapeutic value and support in the ILC. The intention is to administer the survey (attachment 6) to inmate learners. While it can also be administered to staff, the small sample of staff participants meant any estimates would be unreliable.

**WALKTHROUGHS & QUALITATIVE INTERVIEWS:** Walkthrough interviews are established as a valuable method for POE research as it allows the researcher and user participant to locate themselves in the different spaces that are the focus of the evaluation (Blyth et al., 2006; Watson, 2005; Zeisel, 1984). It enables walking through the daily routines in the spaces and exploring what users actually do and feel in different spaces. The intention in this research is that after going through the walkthrough exercise with user participants, a short qualitative interview will also be undertaken to explore users perceptions of the broader impacts of the ILC design on their learning, personal and professional development. The evaluation protocols for the walkthrough interviews with staff and inmate learner participants are provided in Attachments 3 and 4. Additional interview protocols were developed for management, custodial staff and maintenance staff and these were also included in the original ethics application.

**FOCUS GROUPS:** Focus groups are used in POE research to validate and explore issues identified in the surveys and interviews in more depth with a group of participants (Blyth et al., 2006; Zeisel, 1984). They also enable users to engage in the process of problem solving and developing concepts to address issues or improve the environment (Blyth et al., 2006). Any concepts developed by users can included in the report to the client for use in improving the current facility or future facilities (Leaman et al., 2010). In this research the focus groups were undertaken after collating the results from the participant surveys and undertaking an initial collating of issues raised in the walkthroughs & interviews. This analysis informed what topics are explored in each focus group.

**OBSERVATIONS:** While on site the researchers observed the operation and use of the Intensive Learning Centre using a basic ethnographic approach. During and after each day notes reflecting these observations and insights were recorded. These notes included ideas for modification or improvement of the design. The information from the observations was used in conjunction with other information sources when making assessments about the facility.

**LEARNER ASSESSMENT FORM:** This is short questionnaire with four open-ended questions: what did they like about the program; what did they like about the space; what did they not like about the space; and, how had they changed while attending the ILC. Teachers administered the questionnaire to the first cohort of 13 learners who graduated from the ILC in December 2014. Many of these learners were moving out of the ILC program into other vocational programs before the main data collection in February 2015.



## 2. methodology

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### 2.4 Methodological considerations

This section outlines a number of methodological considerations that are important to consider before proceeding to reporting the findings of this research. Some of these considerations relate specifically to the correctional context, while others are broader issues relevant to most building evaluation studies of educational environments.

These issues include:

- challenges of the new environment and program for educators
- industrial issues with the staffing ratios
- pressures to run facility at capacity
- among the learner group dominance of real or perceived issues relating to their management by a correctional officer
- impact and transference of issues in the evaluation of workplace environments

### 3. research findings

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## 3. research findings

This section presents and summarizes the general findings obtained from the use of the various research tools in this study. It includes reporting finding specific to the different user and stakeholder groups. The information outlined in this section is used to respond to the performance hypotheses in Section 4 and the design intention research questions in Section 5.

### 3.1 Building user interviews and workshops

#### Inmate learner interviews (n=10)

##### Classrooms

All the learners were positive about the classrooms, with the majority very positive about the size of the classrooms – both in terms of physical space but also number of students. One learner identified some issues with the sound panels becoming loose, windows not working and the noise during heavy rain.

The tables were liked by most inmates with one commenting, “they’re weird but they work”. Two inmates did state however that they can tip if you sit on the front edge. While students generally liked the size and number, “its good –each inmate gets there own space”, they also stated as a computer desk they weren’t big enough. Students were extremely positive about the smart boards. About half the learners indicated they used the soft seating area often and liked it, while the other half said they didn’t use it but lots of others did. All learners indicated that the quiet room was rarely used and they weren’t sure what it was for.



Most learner liked the tables - “they’re weird but they work” was one comment. A number indicated they liked having there own space

##### Outdoor spaces

A number of inmates said they really liked the feel of the outdoor areas and garden. One spoke of how good it was to walk on the timber decking rather than concrete. Most learners indicated there was not enough shade or seating outside, with a couple also identifying they do not have much free time to spend in the outdoor spaces. Most inmates said that they liked the yarn circle, but only two indicated they used it regularly. Lack of shade and time were identified as issues. All inmates indicated they rarely had classes outside. Three inmates talked intently about wanting vegetable gardens. All inmates liked the walking track; with about half being very positive and saying they used it every day.



Most learners identified the lack of seating and shade as an issue outside

##### Other facilities or aspects

All inmates were positive about the kitchen overall, but identified a larger urn and a water fountain/bubbler as in other work areas is needed. Two identified that a phone is also needed. Most inmates were positive about the library, although about half indicated they rarely had access. Another toilet cubicle was requested and a couple of inmates identified the issue that the urinals can be seen from outside.

##### Overall and impact

At least half of the learner stated that they liked how it felt in the ILC, that it looked and felt different to the rest of gaol so it made them feel like they were at a school, TAFE or university. Most inmates commented how they had changed with a number expressing how they had learnt to use their brain again, and that was a good thing. A number commented on improvement in reading, with many Certificate 1 inmates identifying they could now read books when previously they couldn’t. Three inmates indicated how it had changed what they were thinking of doing when they get out.

#### learner short survey – first cohort

Twelve inmate learners who were part of the first cohort of learners through the ILC were asked to complete a small questionnaire. While this group attended the ILC during a period when fewer inmates used the facility (average of 14 as opposed to 33), they do represent a group who have spent considerable time in this ILC. In the table on page x, we provide inmates learners responses to three of the questions as collectively they provide a sense of the value of the program to this group on inmate learners. We do not include the responses to the question “what I don’t like about the program & space” as there was a considerable focus on issues relating to correctional staff and other issues that could potentially identify some participants. The issues raised nevertheless are also clearly reflected in the survey and interview summaries for inmate learners.

A feature of the responses to the first and fourth questions is that the majority of learners indicate the program has positively changed their perspective about themselves and their future. A number of responses allude to a better capacity to think, make plans and set goals. Some learners appear to take pride and satisfaction in having developed fundamental skills in reading, writing and numeracy. There is a sense that participation in the program has for some created a sense of joy in learning they have not experienced for some time.

In responding to the second question about ‘what I like about the space’, a number of responses refer to the space being nice, relaxed and different so they feel less like they are in gaol. The quality of the facilities and access to technology was also identified by a number of learners. Quite a few learners responded to this question with aspects that could be improved, commonly outdoor seating and shade.

### 3. research findings

#### Survey Responses

	Q1 - what I like about the program	Q2 - what I like about the space	Q4 - how I think I have changed
1	everything, am hoping to continue education throughout my time and do things that will help me on the outside	Being around the teachers who you felt cared. A different environment. Fun educational activities.	Well I think I have made some achievable goals. Set my mind on things for the future. Has changed my headspace very positive.
2	Being mentally challenged. Teachers are friendly. Gives me something to do.	The desks. Smart boards. Foot stools.	I know a few things now. My mind feels fresh. Want to tackle new goals.
3	The teachers are a great help with remembering how to do school work, learning processes, the technology = smart board, is great googling ideas or for truths of subjects, research or interests and we get a certificate for each subject we complete and more incentive to set goals for yourself in a motivating way.	Could of been better, but for the ILC its not like a typical jail set up, comfortable, relaxing, class set ups are good, walking space. It would be good if the inmates could do some sort of gardening, or once completing certificates it would be good for us to have some more access to the ILC after leaving and to further education, eg TPP. IT	I am interested more in education and learning with whatever I can and I now have some sort of sense of achievement. I'm more positive as a person instead of negative yards or slave labour workshops.
4	Not only does it help with education, it gives you more confidence and gives people a goal.	It could be a bit bigger, somewhere to have lunch and proper seats.	Better educated and more of a thinker. PS. And to have everyone in the class on the same level.
5	Keeping our minds active. A different world to daily jail. Relearning and remembering so much from early learning.	Nice, large, fresh, lots of new technology. Art equipment availability. Smart board, outside news broadcasts. Design and outdoor areas, gardens, LIBRARY!!	Use of handwriting for the first time in a very long time. Improved art skills. Refocussed and enjoying simple things, and maths etc. Enjoy some homework to keep active. I AM READING LOTS OF BOOKS!
6	It's different but I learning a lot.	It's a little bit confind but everything is alright.	I've got a better understanding of how to use a computer witch is good.
7	I like the smart board.	It gets you out of the wing for the day and taks things of your might.	I learnt how to be good and spell better and my times tables.
8	Well I was here from the start and when I came book strate into ILC. It's all good I think everyone should do ILC.	The space is very nice and it makes you forget were you are.	Well this place is improving my life heaps and it makes me feel like I'm not in here. I feel like I'm at Tafe or something.
9	It's a good place to come to and the teachers are very patient. I like it here.	It's a bit hot with no air con. But it has helped me become a bit more patient with things.	
10	It helps me.	It is not to bad. You can RELAX.	I have lert to think and more it is a good program.
11	The most thing I like about the program is to me it feels like I'm at tafe or uni. It doesn't feel like I'm in Gaol.	I like being able to walk freely around the compound.	I'm in a better mood each morning. And I look forward to learn more.
12	It's good, I can write a lot better then what I could befor I came here.	The space is good although it could do with a bit of shade cloth out the frunt of the class rooms and around the side at the meating circle.	My reading and writing is a lot better and now I write more letters home. Were as before I didn't write letter at all.

## 3. research findings

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### Learner Workshop (n=7)

The intention in the inmate learner workshop was first to report back to the learners on the findings from the learner interviews and surveys, and then discuss and develop ideas around the most prominent issues identified in the surveys and interviews - outside seating and shade. In addition to these topics, other themes that emerged in the workshop were around "learning content" and "operational management".

### Review of findings

The researchers provided learners with an overview of the findings consistent with that given in this report for the learner interviews and surveys. The inmate group agreed with the general findings regarding the design of the facility and its relationship with the program. Outdoor shade and seating were the main outstanding negative design issues, while learning content and operational management were raised as more general issues. Learners were overwhelmingly positive about their interactions generally with teachers.

### Learning content and intensity

The discussion about learning content was in part prompted by the researchers asking what other facilities they would like in an ILC centre. Some inmate learners had a strong opinion that ILC courses should be more connected to vocational skills and employment opportunities. A number referred to what they were learning as 'theory' and suggested it was unrelated to any specific vocation or work opportunity. Some other inmates however liked that the ILC enabled them to focus on fundamental educational skills such as reading and numeracy that they needed and never learnt at school; "cause I'm illiterate you see, I find the learning part alright. I enjoy it." For these inmates the content represented a real challenge, while for some others who were literate and numerate it was less of a challenge.

Inmate learners were in agreement that the intensive focus on academic skills did become tiring and/or monotonous at times depending on whether they found the content challenging. They suggested there was a need for additional non-academic classes such as physical exercise, gardening or vocational skills that could provide a break from thinking.

### Operational management

The operational management related issues were again prominent such as lack of coffee in the morning, perceived officer inconsistency and hardness of some interactions with correctional officers. Some learners suggested you just needed to accept these sorts of issues within correctional centres. Whether actual or perceived, the associated negativity did appear to influence the overall social climate of the ILC.

### Outdoor areas - shade and seating

The design of the outside areas was discussed for the last half of the workshop, with particular reference to seating and shade. In terms of seating the main issue was enough places to seat that were also shaded. Some suggestions for seating and shade were:

- Tables and chairs in covered space between the two classrooms
- Seating out the front of the classrooms where the roof overhang offers shade
- Move tables from outside library onto the deck in front of kitchen with fixed umbrellas for shade
- Run medium sized shade sails off the area in front of the kitchen and/or over the yarn circle

In addition to shade and seating, other suggestions for the outside spaces included:

- Establish vegetable garden(s) either in some of the adjacent external spaces to the ILC perimeter, and/or in front of the library if the seating is moved elsewhere
- Artwork or murals on some of the external walls of the modules to make the environment more welcoming
- Outdoor vocational spaces for developing skills such as brick-layering or similar



## 3. research findings

### Educator Interviews (n=6)

#### Classrooms

The educators were mixed in their views about the design of the classrooms. While most acknowledged positive aspects of the design, a number of negative issues were also identified. All commented on the lack of air conditioning for the first eight months. A number also highlighted some aspects of the build quality and difficulty in getting defects rectified including the sound insulation coming loose, problems with some windows and condensation. Nearly all teachers were positive about the amount of light and the acoustics of the classrooms. They all commented on the value of the smart-boards, with the taller teachers also indicating the boards needed to be fixed higher. In terms of the working wall, they liked the integrated white boards and storage trolleys but some of the other storage spaces were not being used.

Three teachers indicated the classrooms could be bigger and most indicated that the quiet room was not being utilized and needs redesigning. Only in the computer room was it used where it was housing specialist computer equipment with plans to create a multi-media production room. The open fuse box and difficulty seeing into quiet room was raised as issues. Most educators really liked the soft seating area, although one indicated it could be a distraction for some learners. Two teachers identified a general lack of free wall space to pin-up materials and posters due to the number of windows as an issue.

While most teachers acknowledged the learners liked the tables, three also indicated they would prefer 'normal' tables that offered more arrangement options (including straight rows). One educator found they were too heavy for her to move them around the classroom. While most comments regarding the flooring were positive, a number of teachers identified that it did emit an odour that was particularly problematic in one classroom.

As a dedicated computer room with desktop computers, the classroom set-up was identified as having a number of issues. This included type and size of desks, width and size of room and location of plugs etc. More generally three teachers identified that the ideal ILC room structure would be four classrooms and a dedicated computer room. With only three classrooms, the class groups needed to move rooms constantly to accommodate computer lessons and all individual class groups did not have a 'home room'. Two teachers were concerned about moving to all laptops as they viewed a dedicated room set-up and robust facility was critical when teaching novice computer users.

#### Outdoor Spaces

Most educators were positive about the aesthetics of the outdoor spaces and landscaping, indicating it differentiated the ILC from the rest of the Centre and that it was important for creating a good atmosphere. A number of teachers identified it was valuable to have nice outdoor areas where students could go to cool down if they were getting agitated. All educators identified the lack of shade and seating outside as an ongoing problem that limited the use of the outside spaces for teaching and more generally for inmates. One staff member did feel like the outdoor spaces were too open, made it difficult to contain inmates and resulted in distractions if an inmate(s) was outside while classes were being conducted. One female educator suggested that the openness of the classrooms, and that you could easily see into other classrooms, made it a lot safer space to teach than in a regular school layout.



Most educators questioned the value of the quiet room as currently configured

#### Educators office

All educators suggested the office was too small for the whole staff group. They indicated it could work for four educators plus a correctional officer (at a squeeze), but not the six plus a correctional officer. Lack of a range and amount of storage and preparation spaces was an issue for most educators. All educators liked and used often the large wooden round table. There was a general preference for more wall space for bookshelves rather than windows. The blinds were an important addition as prior to these there were problems with glare and distraction from learners.

Most suggested the kitchen area was cramped and it would be preferable to have separate spaces for food preparation/ eating, and work/ meeting, rather than the combined arrangement. Some educators requested separate male and female toilets. They was also an issue with the main door locking mechanism as you required a key to exit.

#### Other facilities

All educators were generally positive about the library facility, although one indicated the window arrangement limited the amount of wall space for shelving. The inmate kitchen facility was also viewed positively, although nearly all educators identified a larger urn or hot water facility was required.

#### Comparison/ Impact

Most educators were firm in their view that the ILC program has a substantial impact on inmate learners. Estimates ranged from 95% of inmates to 50% of inmates changed substantially through attending the program. One teacher suggested while teaching in the main prison you would get 3 or 4 certificate completions per semester in a class, in here we get 7-8. There was a dissenting view that the ILC program had little impact.

Amongst certificate 1 learners, change was observed in terms of inmates being less threatened with writing, more willing to attempt challenging tasks, ask for support and support others, and generally as a more 'can do attitude'. The quality of the relationships staff build with inmates around learning was identified as fundamental to the change process. One educator suggested "they do seem to experience knowledge as empowering".

While 'what happens in the classroom' was viewed as central to creating this change in inmate learners, they did recognize a physical environment that was relaxing and different to the rest of the prison did have an enabling influence.

There was a general view that some aspects of the overall ILC program – what happens outside and between the classrooms – could be improved to further support change amongst inmate learners.



All educators commented on the value of the smart-boards to their teaching and engagement of learners

### Educator WORKSHOP (n=7)

The intention was to first report back to the educators on the findings from the educator interviews and surveys before workshopping some of the most commonly identified issues and problems. Issues were discussed in relation to the classrooms, outdoor areas, and computer room with the focus around how issues could be resolved in the current or future ILC facilities. In addition to these design-focused topics, also discussed were curriculum/ programming and the intended goals and impact of the program.

#### Classrooms

In general educators agreed that the classrooms were a good space for teaching with the biggest issue being the quiet room / breakout room

The breakout rooms are currently not used due to concerns around the door being locked, an open fuse box being in the room and lack of visibility into the room. There were also some issues around ventilation of the space. Potential options for enabling better utilisation of the room included removing the door and part of the wall to make it a more open space, transforming the space into a vocational activity area and creating office spaces for ILC clerks undertaking higher education.

Home classrooms - the current use of one classroom as a computer room meant that the class groups do not have their own home classroom. Home classrooms were valued by teachers and learners as it provided a space where they can store their belongings, customise the room and build a sense of ownership and respect for the environment. It was suggested this could be resolved by having a spare dedicated computer room.

Learner tables – the design of the learner tables had been contentious among educators from the opening of the facility. A specific discussion was had around how the design could be improved or an alternative design proposed. The main issues with current design were the tables tipping when learners sat on the front edge, and difficulties in configuring the tables with a round front edge. Transforming the design into a trapeze that had a straight front edge and still allowed circular and group configuration potentially solved both the configuration and tipping issue.

## 3. research findings

### Outdoor areas

In general educators liked the design and feel of the outdoor areas and indicated it was important to creating a positive atmosphere in the ILC. Some staff suggested that the outdoor areas were so nice that it could be distracting to inmate learning particularly how the classrooms looked out onto the open spaces – others disagreed.

Shade/ seating - The lack of shade and seating was identified as the main issue with the outdoor space. While this was needed for learners during break times, it was also needed to enable classes to be held in outdoor spaces. Currently there are no places that are both shaded and had seating for ten learners. It was suggested the yarn circle would be better utilised if it was more equipped as learning space (shade, whiteboard, more comfortable seating).

### Computer facilities

Staff were in agreement about the importance of dedicated ICT classes. The lack of ICT skills was identified as a critical deficit for many learners impacting on their capacity to obtain employment on release. However, the retrofitting of a standard classroom as a dedicated computer room was identified as problematic due to issues such as difficulty seeing the smart board, space for computers on desks, cabling etc (clearly evident when researchers observed the classroom).

It was suggested the ideal set-up for an ILC would be a dedicated, purpose designed computer room with robust desktop computers, and a laptop trolley (with enough laptops for one class) that can rove between other classrooms. The efficiency of a purpose designed computer room where the educator can monitor and direct activities to maximise learning was highlighted.

### Impact of ILC program on inmate learners

The educator workshop included a specific discussion around the intended and perceived impact of the ILC on inmate learners. This included a discussion of whether educators believed the ILC program was potentially contributing to reducing the recidivism of inmate learners, and whether this was through educational skills, social skills or how inmates view themselves.

Most staff were strongly of the view that the purpose of the ILC and their role as a educator in the program was ultimately to contribute to reducing the recidivism of inmate learners. One educator observed; "They're different people from when they come in [to the ILC] to when they leave". The educators suggested that most inmates appear to develop educational goals while in the ILC and a view of what steps they would need to take so that they didn't re-offend. The educators questioned whether the impact they have on inmates during the six months in the ILC we be maintained when, for example, they will spend another three years in custody in mainstream industry. They suggested that additional research was required about the impact of the ILC program and how this differs depending on timing of the program in an inmate's sentence. They suggested it may be worth considering whether some inmates could return to an ILC to do a refresher course towards the end of their sentence and to make the necessary links to education on release.

### Curriculum/ programming

Integrated project based learning: Educators were in agreement about the potential value of project based learning and integrated curriculum (i.e. integrated projects that combine skills development across competency areas). It was apparent that a number of educators were investigating ways to employ these approaches. However, there were concerns around ensuring the competencies obtained in project-based learning would also meet the certificate requirements central to the ILC program (i.e. cert 1, cert 2 etc). They suggested a need for strategic course design and designated course designers within AEVTI to assist in designing the curriculum and developing resources that could be shared between ILC facilities.

Vocational course opportunities: Some educators also suggested incorporating more opportunities to obtain industry-recognised certificates within the broader ILC program. This could be in the form on OHS certificates, industry tickets etc. These short courses could provide more variety into the ILC schedule and opportunities for the practical application of the academic skills developed in the ILC program

Improving concentration and focus through more flexible programming: Educators suggested that the lack of non-academic activities in the ILC programming routine might be impacting negatively on inmates' ability to concentrate and focus. They suggested it may be unrealistic and counter-productive to expect some inmates, particularly those with learning difficulties, to engage in intensive academic work for five hours a day, five days a week. They suggested adopting a routine that includes occasional 30-45 minute breaks, allowing learners to engage in physical activity such as exercise or gardening may be beneficial, and not be dissimilar to some high schools.

## 3. research findings

### Correctional officer interviews (n=2)

#### Program + role

Due to their unique role we first asked the correctional officers about their role and views about the ILC program. One perspective on the correctional officer role was its main function was to create structure and order in the program – “inmates need structure”. Another view was in addition to general security their role was “to manage inmates so we keep them in a frame of mind where they can learn”. The staff member was very supportive of the program. One staff member indicated more involvement in teaching and activities would add to correctional officer role. Currently they felt removed from the program and that many aspects of the role were unfulfilling. There were also challenges around incorporating and settling single new admissions into the ILC program outside on the normal intake.

#### Office space

Both officers indicated their office space was too small and that it could possibly be better located so they could better see onto the main outdoor area. They identified it was possible to get locked into the staff office as you need a key to exit which they identified as a fire & security hazard. It was also questioned whether the staff office doors etc were strong enough to enable staff to take refuge for any extended period of time if a major incident occurred. It was suggested the ideal configuration would enable staff to exit the facility to a safe area from the staff office.

#### Classrooms

Both correctional officers liked the classroom spaces and the furniture, suggesting it was the best they had seen within a correctional facility. Some issues were raised around potential hiding places for contraband on external areas of the modules including open corrugation ends and open overflow pipes etc.

#### Outdoor spaces

The look and feel of the outdoor spaces was identified as a positive, however, the correctional officers identified without shade it can be exposed, hot and glary. They identified the walking track was used constantly by inmates, and while generally positive about it as a feature, it did create challenges for supervising inmates learners at times. One segment on the southern side of the walking track near the inmate toilets was not covered by CCTV cameras. Additional shade and seating is required, and will be a necessity if the routine changes to inmate learner having lunch in the ILC. An officer suggested a PA system would be useful.

An issue was raised with the double layer of large security gates to get from the ILC to the main circle. While the officer understood the need, they indicated this thoroughfare needed to be used numerous times throughout a day impacting on efficiency.

#### Other facilities

In general the correctional officer thought the kitchen, library and toilets worked reasonably well.

For the kitchen both officers identified there is a need for a bigger hot water urn. Currently even with staggered coffee breaks the urn does not have enough hot water for a whole class and an electric jug needs to be used. The staggered coffee breaks also mean invariably – even though inmates are reasonably restrained – there is a 45 minute period where inmate learners in class are disrupted by those having coffee in the main area. One officer stated it would be a lot more efficient and conducive to the program if the whole ILC group had coffee breaks at the same time. This would require a larger capacity or instantaneous system with features to stop any misuse of large quantities of hot water. It was also suggested a cold water bubbler like available in the industry workshops would be very useful. There would also be a need for a larger fridge and microwave if the routine changes to inmate learners having lunch in the ILC.

The location of the inmate learner toilets was regarded positively. An officer suggested there was a need for stable doors, and identified an issue of visual access to the urinals from people outside the toilet area. An issue was also identified with the paper towel rack having a metal bar that could be removed.

#### Comparison/Impact

Both officers were positive about the design of the facility, and one in particular viewed the design as having a large impact on creating a safe, calm and productive environment. It was suggested that they observed a change in attitude and outlook in a large proportion of inmates after a period of time in the program.

Our role in the ILC is ...“ to manage inmates so we keep them in a frame of mind where they can learn”.

ILC Correctional Officer



Correctional officers suggested the kitchen needs a larger hot water urn, cold water bubbler, microwave and larger fridge particularly if learner spend their lunch period in the ILC



## 3. research findings

### MNCCC Management Interviews (n=4)

#### Overall facility design

All the managers stated that they liked the design of the facility, indicating it was one of the more positive spaces in the prison. The classroom spaces appeared to be beyond expectations of all the managers in terms of their utility and the positive feel. The managers were all positive about the gardens, with a number being impressed with how they had flourished in the facility. Most liked the layout and the size of the facility both in terms of the number of inmates and amount of space. There were some questions around whether there is enough outside seating and shaded areas for all inmates to spend the lunchtime break in the ILC grounds. Questions were raised around whether an alternative site (back oval) away from the pods would be preferable to the current location—although there wasn't a clear view on this. Managers also identified that due to a range of issues maintaining inmate numbers near capacity in the ILC is a continual challenge.

#### Security

In general, each manager regarded the ILC as a safe and secure place within the prison. The design of the facility was identified as contributing to security through enabling a calm, positive and open atmosphere that is valued by inmates. When inmates value a place and their position in the program then it was suggested they are less likely to be involved in security issues. None of the managers identified any security incidents involving physical aggression in the ILC program. There was a two month period when issues relating to the transfer of drugs was identified – but this was resolved once key players were identified.

While positive overall about the ILC in terms of security, some specific issues were raised. The lock and key system in the ILC is different from the rest of the prison requiring some staff to have additional keys and limiting other correctional officers access to the facility in an emergency. There is a problem with the staff office lock requiring a key to exit, and a question around the strength of the door on the staff office if there was an occasion staff needed to take refuge. A security issue was also raised that tamper proof fasteners were not used on some items such as the sheet iron on the lower sections of the modules, and there are some gaps and spaces where items could potentially be hidden. The location of the ILC between exercise yards of two accommodation pods was identified as causing some additional security issues around the transfer of contraband between the pods – but this issues appears to have been related to particular inmate learner who have subsequently been removed from the program.

#### General design issues

Managers identified some more general design issues. All agreed in the need for additional shade and seating, indicating shade is something that is currently being looked into but may require some additional impetus to progress. A fire related standards issue was recently identified regarding the distance of the ILC modules from the accommodation pods. Management indicated in retrospect CSNSW needed additional consultation and checking mechanisms around specific facility issues such as fire and security hardware. Maintenance of the desk was also identified a number of times, with managers indicating there needs to be a regular oiling schedule put in place. They also identified before the air-conditioning was installed there were issues on both hotter and cooler days.

#### Comparison/ Impact

Managers appeared genuinely impressed with how inmate learners were engaging with the program and the number of certificate completions coming out of the ILC. They suggested in mainstream education it was reasonably rare for inmates to complete, while in the ILC nearly all inmates were obtaining certificates. The intensiveness of the program, and how much the inmate learners are pushed to progress academically, was seen as a feature of the program. It was suggested this was in part possible because the environment is so much more hospitable and 'they enjoy being here'.

“As a useable space for inmates and teaching I think it's fantastic – and I think it's had some positive results.”

Centre management MNCCC

“Overall, I've got no issue with the design or the layout .....

It's a positive place, architecturally there's a good vibe out in here.”

Security management MNCCC

All managers commented on the positive impact of the gardens and landscaping on the feel of the ILC

# 3. research findings

## 3.2 Building user surveys

We report the findings from the learner and teacher building user surveys in this section. In reporting and graphing the results a similar approach is taken to that used in the OCED Evaluating Quality of Educational Spaces report (OECD, 2013). For each positively worded statement\* we calculated the percentage of participants who agree (5 and above) or disagree (3 or below) (see Figure X below). Neutral ratings were included only in the calculation as part of the denominator (i.e. number of participants) but this could mean that a percentage less than 50% agreement/ disagreement could be highest. We then reported whether a higher number of participants agreed or disagreed, and the associated percentage figure.

In exploring the data, we did calculate mean and median values for each item and the interpretation of these estimates was essentially the same. Agreement was deemed a more meaningful measure to report as we are using a relatively small sample of participants who are responding to the same work or learning environment.

\* The statements for only two items were worded negatively. Both were in the educator questionnaire and related to acoustics within the classroom (echo and need to raise voice).



### Learners

#### Classrooms

Learners were overwhelmingly positive about most aspects of the classroom. Over 75% of inmates agreed the classrooms had plenty of space, the temperature was comfortable, lighting was good and they were clean and in good condition. The only classroom items they disagreed with related to different areas to work in, the display of student work and access to the Internet. On all other items such as those related to acoustics, aesthetic and furniture comfort more learners agreed than disagreed, although often it was closer to 50% agreement. Considering many learners commented about the look and feel of the facility in the interviews, it was surprising on the question relating to aesthetics only 48% agreed. This may have been due however to the question wording "welcoming and friendly" being somewhat incongruous in a correctional context.

#### Outside

Learners were less positive in the question about specific aspects of the outside areas. Sixty four per cent disagreed that there was adequate seating and 48% disagreed there were spaces for classes outside. Only 36% agreed that outside was satisfying and 48% that it was welcoming and attractive. There was stronger agreement that the outside areas were well maintained and clean.

#### Safety

Most inmates agreed they feel safe at the school (69%) and in the school grounds (68%), while 48% agreed there was safe storage.

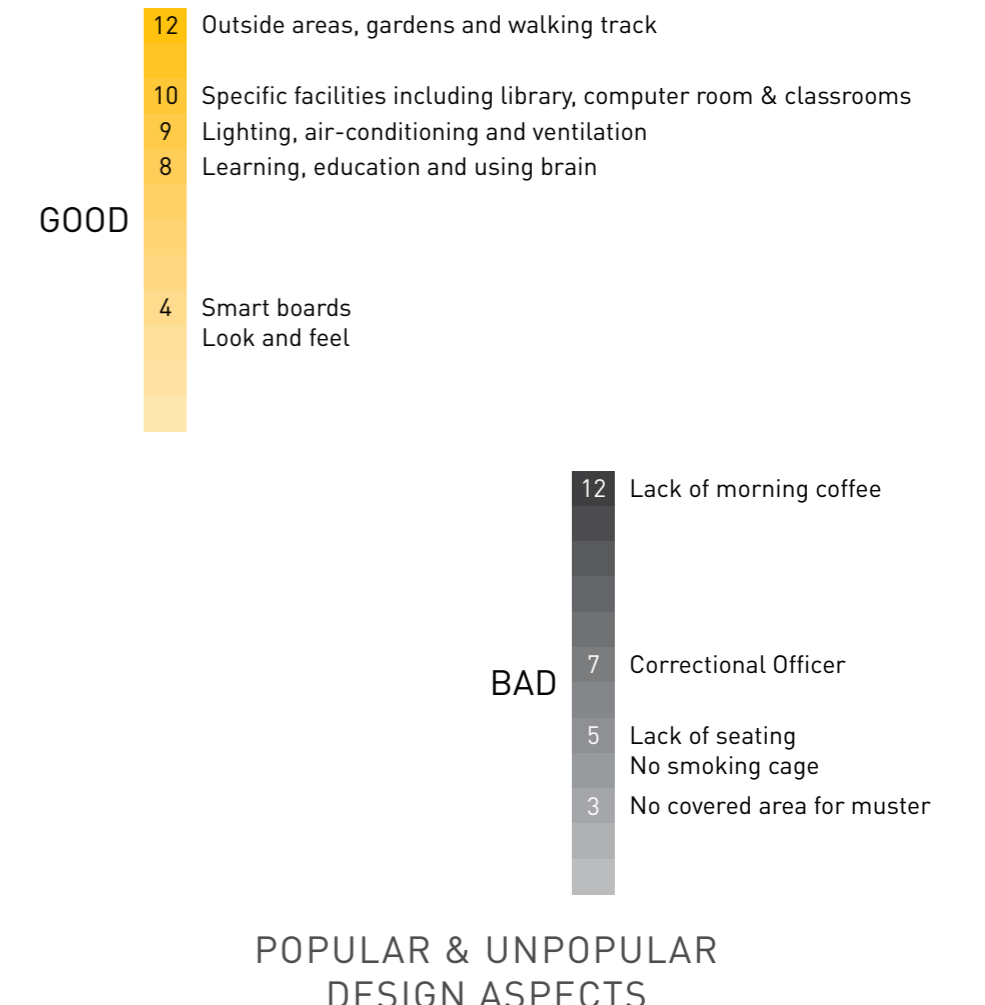
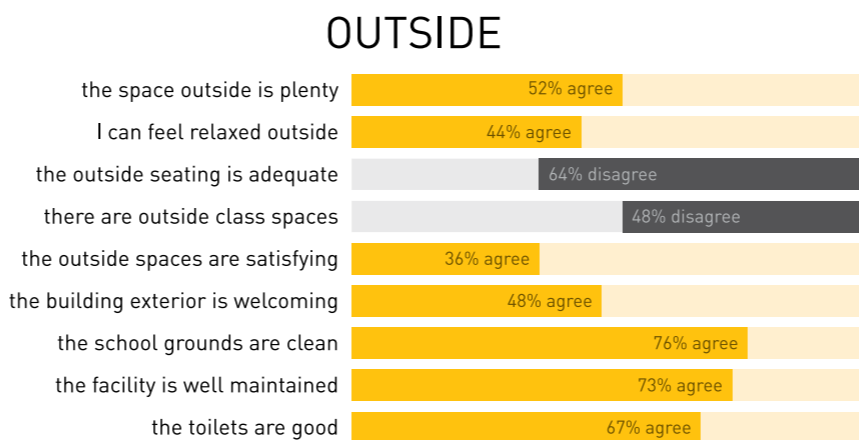
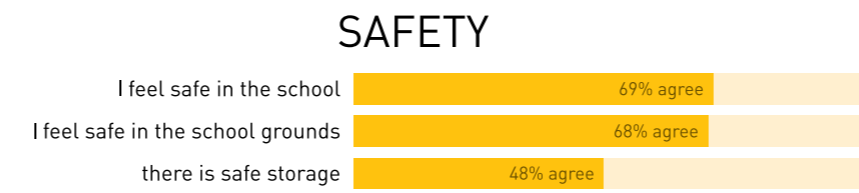
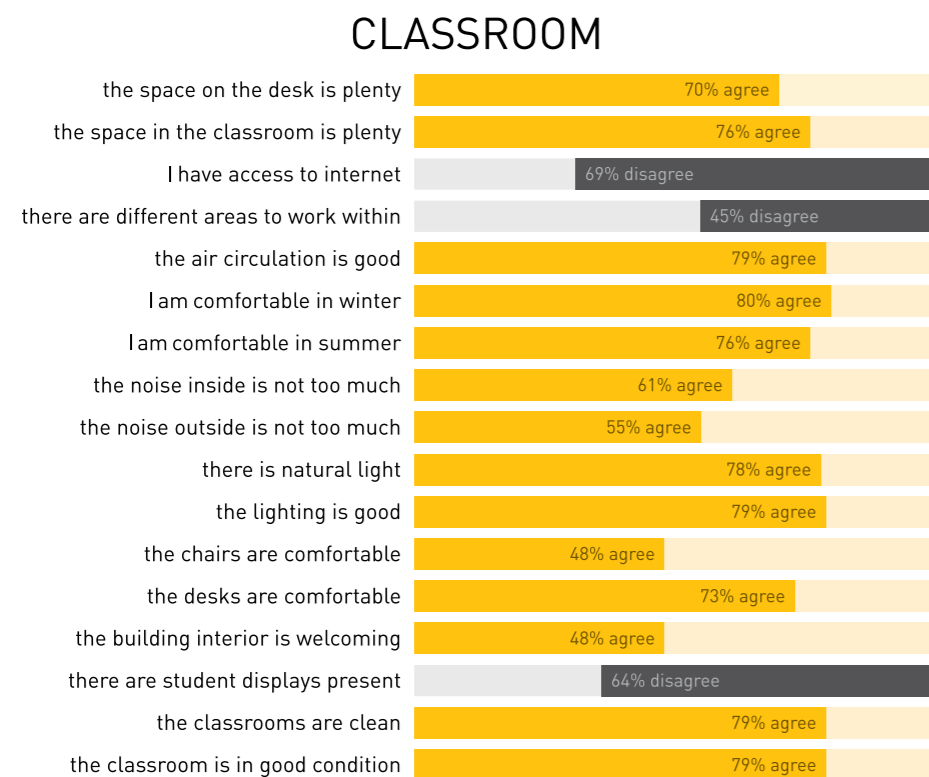
### Impact on learning

In terms of the primary impact measure for learners, 72 % of learners agreed with the statement "In comparison to other places where I have attended education, the design of this Intensive Learning Centre makes it easier for me to learn in class".

#### What is good and bad about the design of the ILC

Inmates were asked to nominate three good and three bad things about the design of the Intensive Learning Centre. Figure x provides a collation of what learners most commonly identified as good about the design out of the xx responses. The most commonly identified good design aspects were the outside areas including the walking track, followed by specific facilities, the ambient indoor environment and the ability to learn.

Out of the xx responses, Figure x provides a collation of what learners most commonly identified as bad about the design. Interestingly, the two most commonly nominated bad aspects were unrelated to the design as they related to lack of morning coffee and correctional staff. This was followed by the lack of seating and no smoking cage.



# 3. research findings

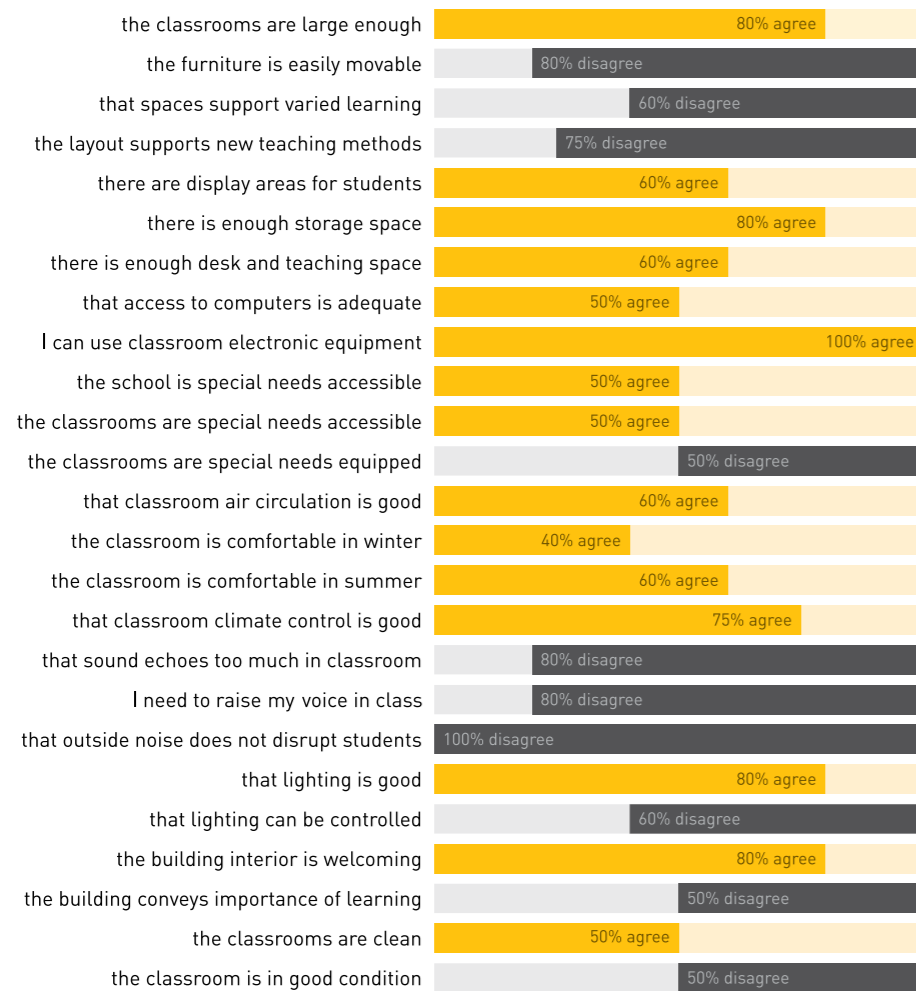
## Educators

### Classrooms

Educators were more mixed than inmates in their assessment of the classrooms. Eighty per cent, or 4 out of the five teachers, agreed the classrooms were large enough, there was enough storage space, the electronic equipment, climate control and lighting is good, and the design is welcoming and friendly. More staff, however, disagreed that the furniture is movable (80%), the design supports varied learning (60%) and new teaching methods (75%), the lighting can be controlled (60%) and the classrooms convey the importance of learning (50%) and are in good condition (50%).

On the acoustics questions, 80% disagreed that sound echoes too much or teachers need to raise their voices. One hundred percent however disagreed that students were NOT distracted by noises outside the classroom. It is likely this relates to students being distracted by noise from other students outside the classrooms who are going to the toilets or appointments etc.

### CLASSROOM



### Outside

Educators were in agreement there was plenty of space outdoors (60%), that it was clean (75%) and the aesthetic is welcoming and friendly (100%).

Learners were less positive in the question about specific aspects of the outside areas. Sixty four per cent disagreed that there was adequate seating and 48% disagreed there were spaces for classes outside. Only 36% agreed that outside was satisfying and 48% that it was welcoming and attractive. There was stronger agreement that the outside areas were well maintained and clean.

### Safety

Most inmates agreed they feel safe at the school (69%) and in the school grounds (68%), while 48% agreed there was safe storage.

### Impact on learning

In terms of the primary impact measure for learners, 72 % of learners agreed with the statement "In comparison to other places where I have attended education, the design of this Intensive Learning Centre makes it easier for me to learn in class".

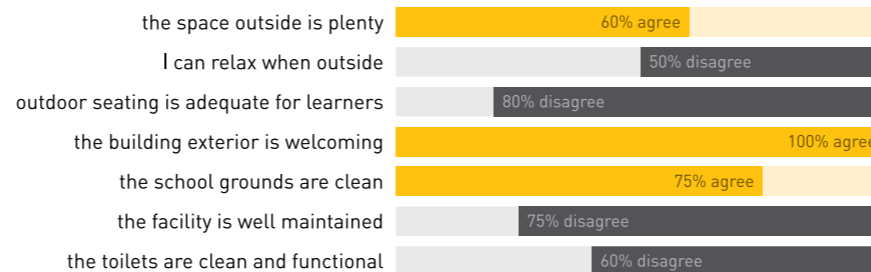
### SAFETY



### IMPACT ON TEACHING



### OUTSIDE



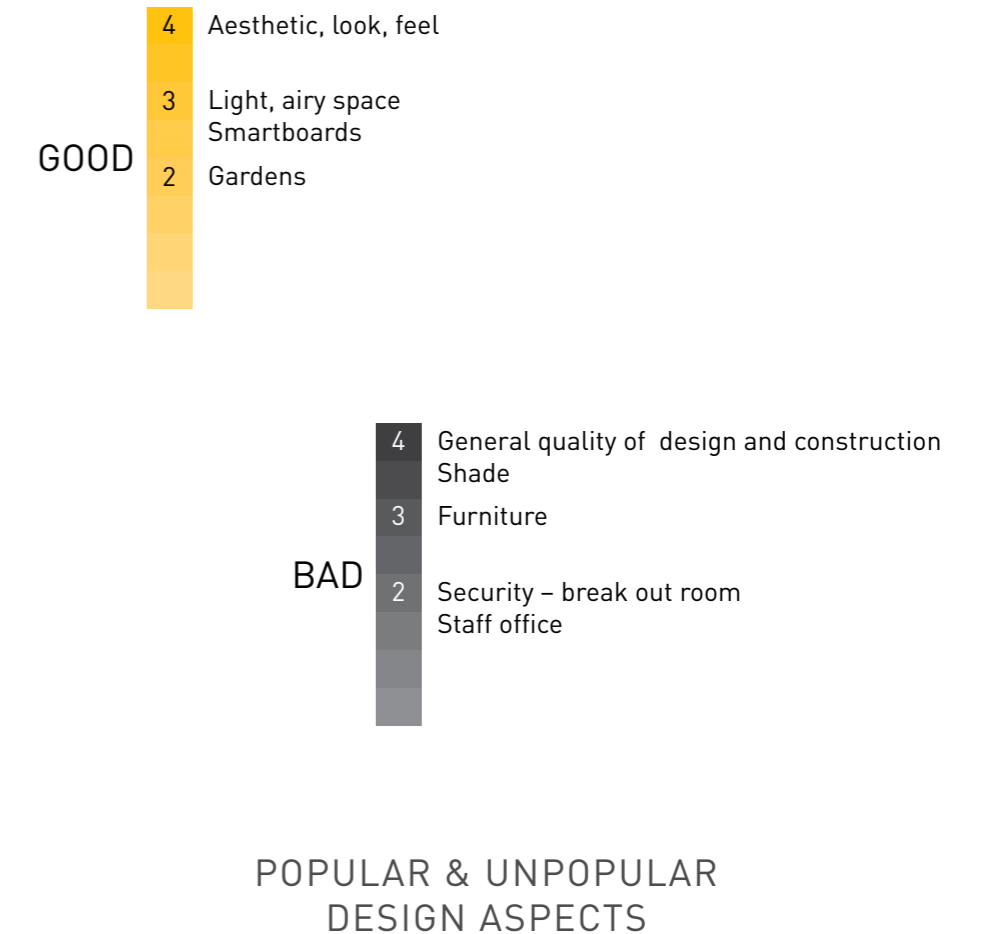
### OFFICE



## What is good and bad about the design of the ILC

Educators were asked to nominate three good and three bad things about the design of the Intensive Learning Centre. Figure x provides a collation of what educators most commonly identified as good about the design out of the xx responses. The most commonly identified good design aspects were the aesthetic, look and feel of the space followed by the inclusion of smartboards and gardens.

Out of the xx responses, Figure x provides a collation of what educators most commonly identified as bad about the design. General design and construction quality was identified most commonly, followed by the lack of shade, furniture design, as well as security and staff spaces.



### 3. research findings

#### ESSEN SOCIAL CLIMATE EVALUATION SCHEMA FOR PRISONS

To assess and develop an understanding of how ILC performed in relation to the therapeutic community aspect of the program, the Essen Social Climate Evaluation Schema for prisons (Schalast, Redies, Collins, Stacey, & Howells, 2008) was administered to the inmate group (n=32). Originally designed to assess social climate in secure psychiatric facilities measuring the core dimensions of 'safety risk', 'therapeutic hold' and 'inmate cohesion and mutual support', it was adapted for general prison populations with the same three dimensions validated (Tonkin et al., 2012). It has been validated for Australian prison populations and used in a number of jurisdictions (Day et al., 2012). Some initial Australian prison norms have also been collected that enable comparisons between the results obtained for the MNCCC and other Australian prison environments where the survey has been administered (Day, Casey, Vess, & Huisy, 2012). Using these norms it is possible to say whether a given result is average, above/ below average, or clearly above/below average in comparison to the normative sample. For the purpose of the current evaluation, this instrument has value in being a brief instrument that asks validated questions about safety, therapeutic value and support in the ILC.

#### Findings

The average score for ILC inmate learners at MNCCC on each of the three social climate dimensions of the ESSEN survey are displayed in the graphic below. While high scores on inmate cohesion and staff therapeutic hold are generally regarded as more positive, lower scores for safety risk indicate a safer environment. For comparison, the average scores obtained with inmate employees in three NSW Corrective Service Industries are also provided in the graphic.

The results indicate on 'inmate cohesion' and 'staff therapeutic hold' the MNCCC ILC is similar to the three Correctional Service Industries, and average in comparison to the available Australian norms. On safety, the ILC inmates clearly regard the ILC environment as safer than those any of Industries and clearly below average in comparison to the Australian norms.

It was somewhat surprising that learners did not regard the ILC more highly on inmate cohesion and staff therapeutic hold considering the therapeutic intentions of the program. This could be due to a number of factors. While the research observed very strong peer-peer and learner-educator relationship within particular classrooms groups, this was not evident between the

classroom groups. A number of the inmates also reported animosity towards a correctional officer that may have transferred to lower rating relating to therapeutic staff hold. It could also be the case that while the ILC appears to be supportive learning environment for many inmates, this does not equate with the caring behaviours assessed in the ESSEN survey.

Regardless, taken on face value the results indicate the ILC is clearly perceived and experienced as a safe place by inmate learners, and that additional focus on activities and structures that may facilitate interaction consistent with inmate cohesion and staff therapeutic hold may be worth considering.



## 4. facility assessment

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## 4. facility assessment

In this section we respond specifically to the research questions and associated statements articulated at the outset of this research. We draw on data and findings presented in the previous section to make assessments for each of the research statements.

### 4.1 Functional Performance

A structured approach is taken to assessing the research statements related to the functional performance of the facility. For each research statement we highlight the relevant data with regard to learners, educators and correctional officers/ managers, and the different assessed qualities (i.e. temperature, acoustics, ventilation). A summary table of these assessment results is also provided on the following page.

1. Most building users perceive the design of ILC improves and supports their learning/teaching and well-being (responsiveness to program)

Most learners (72%) agreed with the statement "In comparison to other places where I have attended education, the design of this Intensive Learning Centre makes it easier for me to learn in class". From interviews and qualitative responses with inmate learners it was clear most viewed the design of the facility as contributing positively to how they felt and their capacity to learn.

Most teachers, 80%, agreed the design of the Intensive Learning Centre made it easier to be an effective teacher and easier to engage inmates. In the interviews while some staff were critical of specific elements of the design and construction process, indicating these were frustrating for their teaching practice, they clearly acknowledged the positive impact of the physical environment on inmates. Correctional officers and managers also suggested a clear link between the design of the facility and how inmate learners responded and engaged in the program.

2. Most building users perceive the ILC design as welcoming and attractive

More inmate learners agreed than disagreed that the design was welcoming and attractive inside (48% vs 24%) and outside (48% vs 18%). These levels of agreement for the survey questions relating to classroom and outdoor aesthetics were substantially lower than indicated in the learner interviews. The learner interviews suggested a stronger positive connection with the aesthetic of the ILC. Many indicated the design made them feel like they were at TAFE or university, and they felt more calm or relaxed. It could use of the word "welcoming" in the survey question may have felt incongruous for inmate learners when used in relation to a building within a prison.

All educators (100%) agreed the outside areas are welcoming and attractive, with 80% agreeing that the inside areas are welcoming and attractive. Eighty per cent of educators also stated the aesthetic was a good aspect of the ILC design. All correctional officers and managers were also explicitly positive about the look and feel of the design of the ILC.

3. Most building users agree with the amount, variety and quality of classroom/ outdoor space (space)

In the survey most learners agreed with the amount (76%) and quality (condition) (79%) of space in the classrooms. This was also supported by comments made by learners in the interviews where a number commented on how they liked the size and feel of the classrooms. Most learners (45%), however, disagreed that

there was a variety of learning spaces in the classrooms. Interview responses suggested this could be due to learners primarily using the main classroom space and desks during classes, with the only alternative space being the soft seating area. The quiet or breakout room was rarely used. Outdoors, most learners agreed with the amount of space (52%), and more agreed (36%) than disagreed regarding the quality of the space. The variety of outdoor spaces was an issue, with 48% disagreeing that there was adequate outdoor class spaces and 64% disagreeing there is adequate seating. Outdoor seating and shade were prominent issues identified in the interviews.

In the survey most educators agreed (80%) with the amount of space in the classroom, but disagreed with the variety (60%) and quality/condition (50%) of the classroom space. Interviews with educators indicated the main classroom space and desks were primarily used during classes, with some educators also actively using the soft seating area. All educators did not view the quiet room as a viable learning space in its current configuration. In terms of quality, the roof sound deadening panels coming loose, condensation on the roof and issues with some windows were raised as issues. Most educators (60%) agreed with the amount of space outdoors, but disagreed (80%) there was adequate seating and a number of educators indicated there was no outdoor spaces appropriate for classes. There was no educator survey question relating to outdoor space quality, but from the interviews the educators appeared generally positive about the quality of the outdoors areas and gardens. The correctional officers and managers were consistently positive about the design of the classroom and outdoor spaces although the assessment was not as intensive as for educators and learners.

4. Most building users experience the environmental conditions (lighting, temperature, ventilation, noise, user control) as comfortable

In the survey most inmate learners agreed with the statements regarding the adequacy or comfort of the different environmental elements including natural lighting (78%), general lighting (79%), temperature in summer (80%), temperature in winter (76%), ventilation (79%), inside noise (61%) and outside noise (55%). Learner interview responses also supported that the classrooms were comfortable environments, with only a few learners suggesting the chairs could be softer.

Most educators agreed in the survey with the statements regarding the adequacy or comfort of the different environmental elements including lighting (80%), temperature in summer (60%), temperature in winter (40%), ventilation (60%), inside noise (80%) and user control of temperature (75%). Distraction from outside noise, however, was identified as an issue by all teachers (100%) and likely relates to the classrooms opening out onto the outdoor spaces. Educators interview responses supported that the classrooms were now comfortable environments, while also strongly stating that this was not the case before the air conditioning was installed.

5. Most building users experience being and feeling safe (operational management/ safety)

In the building user survey most learners agreed they felt safe in the classrooms (69%) and outside areas (68%), while 48% agreed they had secure lockers for their belongings. Learners did not make any specific comments relating to perceived or experienced safety in the interviews, with the general impression being that most inmates did feel quite safe. The results of the ESSEN social climate scale indicate that inmate learner on average experienced the ILC as

safe, and while the Australian correctional norm data is limited for the scale, the ILC was rated as clearly safer than other correctional facilities in Australia where the instrument had been used.

Most educators agreed they felt safe in the classrooms (69%) and outside areas (100%), but did not agree learners had secure lockers (50%). In the interviews and workshops the educators did mention they felt safe in the ILC particularly considering it was within a maximum-security prison.

The correctional officers and managers reported they were unaware of any physical violence incidents within the ILC facility since it has opened. They all suggested they would regard the ILC as one of the safer areas within the centre.

6. Most building users perceive the ILC building as well maintained (serviceability)

Learners clearly agreed that the classrooms were clean (79%) and well maintained (79%), with similar agreement for the cleanliness (76%) and maintenance (73%) of outside areas. For educators, while they agreed the classrooms (50%) and outside areas (75%) were clean, they disagreed the classrooms (50%) or outside areas (75%) were well maintained. While difficult to pinpoint, educators interview responses suggested that disagreement about classroom maintenance could relate to some ongoing issues with the sound deadening roof panels. In terms of outside areas the main maintenance that was discussed related to the oiling of the timber decking.

7. Most building users reported that the ILC design supports the educational and security operational goals (operational management)






Assessment of this last statement relies primarily on the interview and qualitative data sources as there were no survey questions that specifically addressed these issues. Also, as this relates to operational management it was also more pertinent to managers and educators responses.
























































Educators and managers in a variety of centre, security and program roles all indicated that in general the design of the ILC facility supports the operational goals in terms of enabling inmate learners to achieve educational certificates and ensuring the safety of staff and inmates. The classrooms were regarded by managers and most educators as good environments for learning due to their general ambience, amenity and size. The contained, but relaxed and open layout of the facility was regarded by all managers and most educators as supporting the security goals of the facility.

While the views of educators and managers were in general positive, they did identify some specific aspects impacting negatively on issues or risks relating to operational management. In terms of security goals the main issues related to some of the fixtures used not being 'tamper proof' and that the key/lock system was not standardised with the rest of the prison. This included particular issues around the locks on the staff office and small group room. In terms of educational goals, there were some specific issues related to the initial lack of air-conditioning and some defect issues around construction and/or specification. Due to issues relating to shade and seating there was not the capacity to have outdoor classes. Educators also suggested it would be beneficial if there were some opportunities to engage inmates in short non-academic activities to break up the week and promote concentration.

## 4. facility assessment

The following table provides a snapshot of the assessment results detailed on the previous page. The results are rated according to the level of support shown in the key below.

ASSESSMENT	CRITERIA
 Clearly supported	Both the survey and qualitative data strongly (over 70%) confirm statement
 Supported	Survey and qualitative data confirm statement
 Unclear	Data neither confirms nor contradicts statement
 Not supported	Survey or qualitative data contradict statement
 Clearly not supported	Survey and qualitative data strongly (over 70%) contradict statement

		Learners	Educators	Officers/Managers
1. Responsiveness to program				
2. Welcoming and attractive	Inside			
	Outside			
2. Spaces inside	Amount			
	Variety			
	Quality			
3. Spaces outside	Amount			
	Variety			
	Quality			
4. Classroom comfort	Lighting			
	Temperature			
	Ventilation			
	Noise			
	User control (temp.)			
5. Safety	Classroom			
	Grounds			
	Lockers			
6. Serviceability classrooms	Clean			
	Maintenance			
6. Serviceability outside	Clean			
	Maintenance			
7. Operational management	Education			
	Security			

## 4. facility assessment

### 4.2 Design Intentions

1. The ILC feels different to the rest of the prison – a safe, motivating and productive place of learning: encouraging inmates to adopt the role of a learner

Teachers and learners mostly perceived the ILC as being a positive learning environment which felt different from the rest of the prison.

“Not a gaol environment, it’s a school environment. The boys appreciate that” - learner

“A nicely different environment from the rest of the gaol, especially the deck and plants make it look softer, less austere” - Teacher

More specifically, the space was often referred to as an adult learning environment. Which appeared to assist learners in adopting the role of adult learners

“it’s like a TAFE, not a goal” - Learner

“We’re here as adults to learn” - Learner

Overall, the educational design appeared to create a relaxing environment and contributed positively to learner engagement. Aspects such as light, colour, layout, planting and the use of technology were often mentioned:

“The students are more relaxed as it’s a different environment from the rest of the gaol” - Teacher

“Colour plays a big role. Colour can effect mood. They’re relaxing colours” - Learner

“It’s a modern, spacious, fairly well designed, nicely landscaped environment that is fairly conducive to learning” - Teacher

This had contributed to a number of positive outcomes including, an overall sense of value in the space, reflected in the low numbers of graffiti and vandalism:

“They appreciate that it’s a unique space, and that disruptions in behaviour or harm to the physical space could potentially jeopardise this for everyone.” - Teacher

As well as high rates of certificate completion and low rates of violent incidents (when compared with education delivery outside the ILC):

“Teaching out there (in the wing) you’d get 3 or 4 certificate completions per semester, in here we got 7 or 8” - Teacher

“There would be an incident once a month in the wing. There’s been none here in 6 months” - Learner

It’s important to give due recognition to the work of ILC staff in achieving these successes. In relation to the design’s intention to encourage the adoption of educational roles the MNCCC prototype appears to be contributing positively to this. However the design is yet to reach its full potential as an un-punitive environment.

“It’s pretty good, but it could be better. The physical environment is only a small part of that. It’s more to do with who you’re choosing to

come in here and things you put in place to foster that good learning environment. It’s still a bit of a punitive environment in here, it hasn’t reached it’s full potential” - Teacher

This resulted from a broad range of factors, both design and non-design related, and although many are beyond the scope of building evaluation (and solutions lay outside the scope of design), they are issues worthy of discussion in the design and planning of future ILCs.

- One significant challenges related to learner relations with ILC overseers; punitive style disciplining, rationing coffee, mustering rituals contradicted the inmates adopted role as learners: “we’re here as adults to learn, but we’re hassled all the time and spoken to like children” (learner). Moving learners into the pods during lunch breaks further reinforced the “inmate” role and interrupted the ILC’s ability to create a space for learners to be fully immersed within an educational environment.
- The ILC’s location between two pods physically connects it to surrounding prison activities; call and response between adjacent pods posed distractions (particularly to teachers during class breaks), and being within throwing distance of the pods resulted in challenges with controlling contraband
- The daily schedule ran as an industry unit, questions were raised whether this structure was asking too much of learners within an educational context, particularly for those experiencing difficulties with learning

2. Enables learning communities to establish as various scales: individual, group, class and ILC wide interaction

Within the design a range of spaces were intended to encourage interaction in various group sizes.

Adjoining external spaces aimed to facilitate interactions between teachers and class groups during coffee breaks, outdoor projects and special events. This appeared to be successful during special events such as graduation where the double classroom (with operable wall stowed) provided a light, generously sized room for formal proceedings and the outdoor spaces were utilised well for informal gathering. Barbecues were placed in front of the library, teachers and learners mingled over lunch in the yarn circle, on the outside tables and central deck.

Within the daily ILC routine however there seemed to be little interaction as an entire ILC group, despite the strong communities which had developed within the classrooms. Some of the previously discussed punitive challenges contributed:

“They feel safe in the classrooms but they don’t feel safe when they go into the rest of the space. And that’s the therapeutic stuff that needs to happen for it all to gel together and make a difference” - Teacher

however there were also a range of other design and systemic factors:

- Operationally, there were few moments when all learners were on the ILC grounds together, in the morning they were moved from A pod directly into classrooms, coffee breaks were staggered, then learners were moved back into the pod during lunch and directly after class.
- Morning coffee sessions had been revoked and tea breaks were staggered between class groups, an overseer had expressed it was difficult to serve coffee and manage them as an entire group. This issue was heightened by

a hot water boiler which only distributed small doses of hot water. Teachers seemed to miss the coffee ritual, expressing it was an enjoyable moment and interactions with learners provided important opportunity for social development.

“The morning coffee was a really important ritual, the guys would come in and chat with the teachers about their weekend or what they’d read in the paper. You could see the guys building relationships and improving skills in social engagement. These skills are just as important as the education skills” - Teacher

- Many respondents expressed there were significant issues with the outdoor spaces which inhibited project work. A lack of shade being the biggest deterrent, air-conditioning noise above the outdoor tables made them an undesirable place to sit, the height and material of the yarn circle stones made them uncomfortable for long periods of time and there were limited features to encourage outdoor activities such as veggie gardens, COLA etc.

On the scale of class groups however, it appeared that strong communities of learning had developed. The classroom spaces appeared to provide a safe controlled environment which allowed teachers to build supportive learning communities. Interactions within the classroom primarily occurred on a class-wide scale, the tables for instance were seldom arranged to facilitate group activities, nor did individual learners utilise the quiet room for private study. Teachers did express that the nature of the curriculum and the correctional context were generally more suited to class-wide teaching. However a number of design factors were also mentioned as inhibiting group work; limited amenities in quiet rooms, missing workbenches classroom desks that were difficult to configure were all mentioned.

“the guys like them (desks), but I’d like something more conventional. It’s hard to configure them in different ways...the circle thing is a good idea but the teaching focus is still on the whiteboard” - Teacher

The soft seating areas were one feature that appeared to be succeeding in encouraging informal interactions within small group scales as well as offering respite for individual learners. Within one classroom it had been dubbed the “chillax” area and was stocked with books and math games from the library.

“they Love that, that’s called our chillax area. That’s where they go to play games or read if they’re stressed out” - Teacher

3. Utilised 21st century learning technology and approaches: offering a stimulated learning experience akin with contemporary teaching practice

Within the ILC the provision of 21st century learning technology was implemented in two main areas, firstly the installation of interactive whiteboards within each classroom and secondly with a dedicated ICT room equipped with XXX desktops computers.

The IWBs are a feature within the space which appears to be succeeding in encouraging 21st century learning practices. Many teachers and learners expressed they have been an incredibly valuable tool in delivering content in engaging ways. Learners were observed interacting with the whiteboards on multiple occasions; completing maths equations and plugging in data cables in ICT simulations for example. This indicates that the IWBs are encouraging teaching practice beyond traditional style of passive lectures. This observation was supported by interviews where teachers expressed that they were shifting



## 4. facility assessment

practice and engaging learners.

“It’s definitely changed the way I teach, yesterday I taught a subject on perspective drawing, it’s not a very sexy subject, but this time I was able to show them a few short videos on the history of perspective drawing, a tutorial and another video on funky 3d pavement paintings, that got the guys interested and inspired” - Teacher

In relation to the ICT room there was more room for improvement. There was definite value in learning ICT skills (some learners even expressed it was the most valuable element of the ILC),

“It’s been good to learn more about computers” - Learner, when asked the best thing about the ILC

However the facilities and infrastructure had been challenging. Firstly regarding the infrastructure The ICT teacher was motivated to custom design learning portals but the software and network capabilities proved to be a very challenging platform to implement anything but the basics, and even getting these working in the early stages was challenging.

Secondly, the classroom had proven to be challenging as it was never designed to be utilised as an ICT room. As the approval for laptops was delayed and desktop computers were specific this space was re-purposed to accommodate the necessary infrastructure. The main challenge in resulted from the size and shape of the tables, which were difficult to configure for computer use and were not large enough to accommodate computer hard drives, resulting in limited desk space and difficulties seeing over the monitors during tutorials.

When asked whether laptop computers were preferred over desktop PCs teachers expressed value in having both. They explained the difficulties in relying entirely on laptops for ICT delivery as they were less ergonomic and more difficult to engage with educationally (unable to easily interact with data ports, understand the relationship between software and hardware etc.). Teachers also raised that desktop PC’s are the preferred tool in TAFEs and trade workplaces, there is therefore advantage in building learner’s familiarity with “industry standard” tools.

On the other hand Laptops would provide opportunity for ICT to be easily integrated into other classwork in flexible ways, as well as improving work flow (learners currently have to wait until computer class to type assignments). However teachers expressed that one set of 12 laptops would be sufficient, they could be shared through the ILC. Consequently it became clear that a combination of one designated ICT room and one roving laptop trolley would be the recommendation for future ILC’s.

In relation to the design of the ICT room one teacher suggested an alternative configuration which worked well within TAFE ICT facilities.

4. Offered opportunity to engage in both passive and active learning through a range of formal and informal activities: encouraging social and cultural growth, project based learning and respite for learners

Observations revealed that the majority of teaching and learning was being delivered through formal lecture style classes, Teacher’s expressed that this style was more suited to the nature of the content and correctional environment, however many expressed interest in incorporating more active learning activities within the ILC course.

A number of active, informal learning exercises did seem to be working well:

- Interactive learning games on the IWB
- Maths games and magazine reading in the quiet areas
- Creative project posters were hung in some classrooms
- Practical VET courses like Barista training and small motors had run
- An art teacher had collaborated with LLN teacher to create art projects that incorporate LLN
- The library was offering opportunity for personal reading
- In a maths class learners were circling the walking track, measuring the ILC perimeter as well as utilising the outdoor kitchen to fill jugs to measure water volume
- During some seasons groups had begun the morning class in the yarn circle
- A learner was growing tomatoes in the entrance gardens

Despite this many learners still expressed there was limited opportunity to engage in practical tasks that allowed them to put knowledge into context.

“Theory after theory after theory, it’s monotonous.” - Learner

“If we had something that gave us a practical component, then we’d have something we could use in practice.” - Learner

They expressed that focusing more on trade qualifications would be more valuable

“If inmates got out with a trade qualification, they’d have a guaranteed job the minute they got outside, rather than have to go back to crime.” - Learner

Some teachers expressed this was not the purpose of the ILC, which was more focused on intensive numeracy and literacy prior to industry work. However others expressed value in incorporating VET

“This ILC is missing a place for vocational training. John Morony had a shed for small motors. They have taught that here but it had to happen on the floor” - Teacher

and recalled that the ones which had run at MNC had been well received

“We’ve had one class of small motors and a Barista course, and both of those worked really well” - Teacher

In incorporating more active or informal learning experiences, a number of systemic and design issues were raised. Systemically teachers expressed that the course was still developing, there were few reference points (compared with TAFE for example which have large databases of lesson plans and teachers notes), and time constraints were challenging enough to get through the required content. In relation to design challenges they mostly related to issues previously discussed; lack of facilities such as workbenches, wet areas, veggie gardens and shade.

A number of design possibilities were raised in order to better facilitate integrated learning, firstly situating the ILC closer to industry units and secondly

by providing a more equipped COLA with workbenches, lockable shed and wet area that could act as a designated art room or ‘project space’ to facilitate small motors, barista and horticulture classes.

## 5. recommendations

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## 5. recommendations

Drawing on the views of building users and the analysis of the research team, recommendations are provided for the current Intensive Learning Centre at MNCCC, and then for future Intensive Learning Centres utilising this prototype. We provide top level recommendations with additional specific and/or technical recommendations in the appendices where relevant.

### 5.1 MNCCC Intensive Learning Centre

#### Small group room

The smaller enclosed space intended for small group work has not been used as originally envisaged. Issues with the room being enclosed, lockable, and not very clear in its intended use has led to the rooms being under used or used for storage. This (and the lack of standing workbenches) has likely contributed to educators and learners suggesting there is not a variety of learning spaces in the classroom. A range of potential options exist for adapting its use (i.e. computer terminals, ILC clerk office) and design (remove door, wall).

*Recommendation 1:* Undertake a review with building users of the use and/or design of the small group rooms to develop, specify and cost agreed concepts to ensure its future use supports the program objectives.

#### Inside – outside standing workbenches

A feature of the original classroom design was standing work benches that bridged the large sliding windows at the front of the classrooms (see image below). These benches were to create an additional learning space. This concept was not implemented during the construction phase on site and instead the benches were placed in a location where they are rarely used (see image below).

[Image: concept]

[Image: current location of a work bench]

*Recommendation 2:* Review standing workbench concept with view to re-specification and costing for implementation.

#### Computer classroom

A common view expressed by educators was that a dedicated and purpose-designed computer room would contribute substantially to the impact and overall efficiency of the program. Learners and educators recognise the critical importance of computer skills external to the prison. Currently computer classes occur in an adapted general classroom space that is inefficient for this purpose. The use of a general classroom for this purpose also has meant that each of the four learner groups do not have their own home classroom.

*Recommendation 3:* Consider moving the library to a slightly larger and more central position in the centre and the converting of the existing library into a dedicated computer room.

#### Shade sail

The shade sail that was in the original design to provide amenity for the main outdoor gathering space was not installed. The sail provides the connection of the classrooms and affords shelter for lunch times. A lack of shaded outside seating was the most consistently identified negative aspect of the current design.

*Recommendation 4:* Review shade sail concepts to create a clear brief for the purpose of engaging an appropriate design and construction company

#### Kitchen capacity

While the general design of the ILC kitchen was praised, the small capacity water boiler (5-6 cups) currently creates problems at morning tea time as it cannot service one class let alone the whole ILC learner group. This means the whole ILC group rarely spends time interacting together in the ILC space. Some alternative concepts and products to manage any risks associated with a larger capacity water heater are included in Appendix a.8.

The kitchen also needs to enable inmate learners to remain in the ILC for lunch (currently they return to pod primarily so they can smoke which soon will be irrelevant). The kitchen, however, does not have a microwave, large fridge space, water fountain or phone that is generally considered standard within Industry spaces where inmates spend their lunch time.

*Recommendation 6:* Review amenity of the kitchen with the view to ensuring it has the amenity to support learners remaining in the ILC during morning tea and lunch time periods (hot water, phone, fridge space, water fountain). A larger capacity water heater is a particular need as it is impacting on the ILC program and opportunities to develop a supportive ILC learning community.

#### Deck maintenance

Colour was an integral part of designing beyond the walls of the prison and The deck finish exhibits an advanced deterioration due to sun and weather exposure. Clearly, the original finish does not meet the serviceability expectations of the ILC and other coating products should be researched and considered. The life expectancy of any decking finish will likely be enhanced with the introduction of a shade structure.

*Recommendation 8:* Obtain specialist advice on deck maintenance then document and implement a regular maintenance schedule.

#### Yarn circle

The yarn circle was originally imagined and designed as a space for the informal exchange of ideas and as an alternative classroom space. There are a number of reasons for the underutilisation of the yarn circle, including exposure to the weather and the material and comfort of the seating arrangement.

*Recommendation 9:* Consideration should be given to developing the yarn circle to achieve intention of an outdoor classroom (shade, seating comfort & whiteboard against the adjacent wall).

#### Library outdoor seating

The main outdoor seating (other than the terraced decking and yarn circle) are the two tables outside of the library. These tables are underutilised as they are situated where the accommodation pod air-conditioning exhaust comes out as well as not having any shade.

*Recommendation 10:* Review with building users the positioning of these tables with to relocating in a position where they may be better utilised.

#### Colour

Colour was an integral part of designing beyond the walls of the prison and considered a way of connecting to country. The colour scheme for the entries of the classrooms and library was a geographical reference within the ILC was not fully completed to the concept plans. The colour scheme was also associated with a naming system for the four classrooms. Currently the classrooms are named classrooms 1 to 4.

*Recommendation 5:* Consider completing the specified colour scheme to align with the original plan and use the associated naming system.

#### The tree

The tree planted in the centre space of the ILC is clearly not appropriate for its location. It appears to be a rainforest tree and has not been able to adapt to the exposed conditions.

*Recommendation 7:* Replace the tree with a more appropriate species on the advice of the local horticulturalist.

#### Vegetable garden and/or external program spaces

Inmate learners and some educators indicated there would be substantial value in creating spaces where hands-on or specific vocational skills training could occur. Incorporation of a vegetable garden within or in an area adjacent to the ILC was one of the most frequently suggested options. If the library seating was moved as suggested above the space could potentially be used as a vegetable garden.

*Recommendation 11:* Review with building users options for establishing vegetable gardens with the ILC facility to provide an alternative activity to break up the academic curriculum.

# 5. recommendations

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## 5.2 Future Intensive Learning Centre

### Adoption and incorporation of learning

In regards to each of the above recommendations and associated issues outlined for MNCCC, adopt the learnings from this existing facility and incorporate in further codesign with future centres. The issues include:

- classroom configuration and small group space
- kitchen amenity
- furniture refinement (additional details in Appendices a.4 and a.6.

### Office Amenity and layout

The original brief called for office space for four teachers. There are up to six teachers at the ILC and the space is very tight. The space also incorporated a small kitchenette and eating in the centre of the office. This eating space is also used for meetings and material collation. It is clear from the discussions with the teachers that this space isn't working efficiently for them, both in the amount of space, functionality, and the amenity

### Computer room

The ILC identified the need for a computer room that allows ready access to the computers so that inmates can build computer literacy skills.

Consideration should be given to incorporating a specific space for developing computer skills.

### Home classrooms

Interviews with the inmates revealed that they would really like to identify their learning space in the ILC as a home room. There were practical reasons expressed, but the overall feeling was the need to identify with a particular space. It is apparent that the potential for change, or the inability to claim a space is proving a negative influence on the student. Apart from wanting the familiarity of a home room, the inmates were concerned with others messing with their work, and stationary.

### External program spaces

Inmates indicated that they would like more engagement with hands-on physical activity. There was strong interest in expanding the growing of food plants in the ILC. There was also interest in creating spaces for the development of specific vocational skills.

## Program recommendations

### Build the ILC level community

ILC activities  
correctional officer involvement  
celebrate achievement

### Project based & integrated curriculum

curriculum writing  
support

### Timing and impact

formal link to learning outside ILC  
refresher prior to release

### Promote continuity of learning

ILC clerk positions > also tertiary student

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# appendix a.1: statement of purpose

## Intensive Learning Centre

The purpose of an Intensive Learning Centre (ILC) is to support CSNSW in its goal to reduce the risk of reoffending and facilitate positive reintegration by addressing an offender's criminogenic needs (low education achievement is an identified risk of reoffending).

The aim of an ILC is to reduce an inmate's risk of reoffending through educational achievement as measured by the attainment of nationally accredited certificates. An ILC provides full time education programs for learners within a culture of learning and results in learners acquiring literacy, numeracy, communication and additional skills to equip them for participation in offence-related programs available in CSNSW, as well as further learning and work opportunities.

The model of the Intensive Learning Centre is similar to the 'therapeutic community' model which identifies need and provides intensive activities to address that need in a specialist supportive community. This is similar in concept to the SOTP, VOTP, Gurnang Life Challenge and IDATP. While each of these focuses on other criminogenic factors considered key in the process of reducing recidivism (such as AOD or violence), the Intensive Learning Centre functions specifically to intensively address educational needs. Offenders require a minimum level of literacy (ACS 3) to be able to fully participate in offence-related programs to address their other criminogenic needs.

### Background

CSNSW is committed to reducing the rate of re-offending in NSW. Under the NSW2021 Plan a target reduction in the rate of re-offending has been set at 5 per cent by 2016. Additionally, the Federal Government has recently announced its intention to ensure all Australian residents are trained to a minimum level of Certificate III. Furthermore, Goal 6 of the 2021 Plan states a target of a '50% increase in the proportion of people between the ages of 20 and 64 with qualifications of AQF Certificate III and above by 2020' and Goal 15 states that '90% of 20-24 year olds have attained a Year 12 or AQF qualification at Certificate III or above by 2020'.

Many offenders have not completed year 10 and have experienced disrupted schooling. Most offenders have low levels of competency in literacy and numeracy and poor employment histories. Offenders assessed as high risk of re-offending (as measured by the LSI-R) are likely to have low levels of literacy and poor cognitive abilities. In order for offenders to effectively participate in offence-related programs and perform in the work place they require minimum reading and writing levels of 3 on the Australian Core Skills Framework. These skills levels are assessed by Education staff when offenders undertake the Core Skills Assessment.

The Adult Education & Vocational Training Institute (AEVTI) has located education resources at all correctional centres to provide offenders with opportunities to increase their literacy, communication, employability and work skills. However, due to a number of factors which may occur at the correctional centre (including high levels of inmate movement, restrictions on access to programs, and competition for inmate time between employment, offence related programs and education programs), offenders may have limited time to attend education courses and as a result do not complete their course. Full time education programs in dedicated learning centres provide a supportive environment which overcome these operational problems and ensure risks

identified by the LSI-R are better met.

The NSW Government has provided funds to enhance education and training programs in prison for the period 2011/12 to 2014/15. CSNSW will use a proportion of this additional funding to increase the number of Intensive Learning Centres (ILCs) across the state. New ILCs will be considered for the South Coast CC, Mid North Coast CC, Lithgow CC and a metropolitan women's correctional centre. Additional resources will be allocated to the Wellington CC ILC.

### Intensive Learning centres

A correctional centre Intensive Learning Centre (ILC) is a specialised education unit which delivers fulltime education programs for offenders assessed as having low levels of Literacy and Numeracy and who have a minimum of 6 months before their earliest possible release date (EPRD).

Eligible offenders should participate in an ILC program early in their sentence to allow time for participation in offence-related programs and employment through their sentence.

Whilst it is recognised that each correctional centre operating an ILC may differ in profile and operation, a number of factors are fundamental to the operation of an ILC:

### Criteria for ILC participation

- A minimum of 6 months before EPRD to complete a Certificate course<sup>2</sup>
- Where possible, young adult offenders (YAO) should have a minimum of 12 months before EDR to participate in further stages of the YAO program once the ILC program is completed. Assessment of need is determined as an Australian Core Skills score of 3 or below and a medium to high level of risk in the Education and Employment domains of the LSI-R. However if the LSI-R indicates a low level of risk in these domains and the ACS score is 3 or below, the offender still meets the assessment criteria for entry.
- A type of placement hold will be put on offender learners engaged in the Intensive Learning Program for the duration of the program to ensure courses can be completed, certificates achieved and graduation ceremonies can be attended. Course completion is central to ensuring maximum value for public money investment.

### Program design, delivery and resources

- Each Intensive Learning Program should respond to the learning needs of those within the correctional centre. A well-planned menu of educational programs at various certificate levels should be planned, flexible and available to use in response to the needs of an often rapidly changing inmate population.
- The Intensive Learning Program should be scheduled as full time to maximise Certificate completion within 6 month time frame<sup>3</sup>
- The Intensive Learning Program should be customised to meet the learning need/s of each particular class and the individual learners within that class
- Adult education principles including a learner-centred inquiry-based approach should be applied

- The goal of the program is not only to improve the reading, writing, numeracy, oral communication, employability and learning skills of each group, but to ensure each student graduates with a Certificate<sup>4</sup> which has currency in the community and a clear pathway to their continued learning
- The program is to be based on Certificate<sup>1</sup> Introduction, Certificate I & Certificate II in the Access Employment, Education and Training Framework (AEET), with clear progression routes to Certificate III and/or Tertiary Preparation Program as appropriate
- Appropriate vocational units from courses on the AEVTI scope and/or TAFENSW are to be integrated into each Intensive Learning program.
- Teachers are to be assigned to each group for the duration of the program to build rapport with their learners, develop a collegiate approach to course delivery and support case planning and management
- A Correctional Education Officer is to be assigned to each ILC to administer the program, including selection of students, allocation to groups, review learners' progress and to plan post-program pathways to further education and employment.
- The ILC should operate separately from other education and program facilities in the centre, in the same way that industries operate separately from other education and program facilities. This is not to say that Intensive Learning programs should not be flexible, but is to state that the offender learner's primary work area is the Intensive Learning Centre and wherever possible, all other programs should be accessed outside of ILC hours.
- A minimum of 4 hours per day should be spent in formal lessons in the ILC. Operations at the centre may need to be modified to enable this.
- Sufficient resources are to be allocated to the ILC to support course delivery and foster independent study and research, including library resources, digital technologies and professional development.
- Offenders are to be given learning incentives acknowledging effort and progress through an incremental pay scale matched to industry pay scale.
- Learning achievements are to be acknowledged through a graduation or similar event which include invitations to family and friends

# appendix a.1: statement of purpose

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## John Morony ILC Model: 2004 to 2011

The ILC at John Morony Correctional Centre (JMCC) opened in 2004 at the instigation of the Commissioner Mr Ron Woodham, with the aim of supporting CSNSW's commitment to reducing re-offending through targeted programs. This ILC has operated as a full time education program for young adult offenders, focussing on the educational needs of male offenders aged 18 to 24 years who had not succeeded in the school education system.

The John Morony ILC has been very successful in engaging young offenders in learning and achieved a high rate of certificate completion. Elements of the ILC program that were evaluated as contributing to this success are:

- Oversight by a steering committee, comprised of key internal stakeholders, to guide and support the establishment of the program
- Establishment of selection criteria as medium to high risk of re-offending (LSI-R), low literacy and numeracy skill levels, 12 months or more prior to EDR.
- Classification of offenders to JMCC for the duration of the program
- Allocation of similar ability students to each group
- Implementation of a motivational program prior to entry which included an interview (EPI) covering learning needs, aptitudes and aspirations
- Instigation of a signed learning contract at the commencement of the program
- A set commencement and completion date (no roll-on/roll-off enrolments)
- An ILC-specific orientation program, which included sessions on understanding theories of learning, identifying barriers to learning and strategies to overcome those barriers Recruitment of highly motivated staff to work specifically in the program
- Development of a collegiate approach by staff to the delivery and evaluation of the program and case management of each offender learner
- Establishment of a dedicated Correctional Education Officer position to administer the program, review each offender learner's progress and assist each one to develop a whole-of-sentence and post-release pathway to further education and employment.
- Establishment of a purpose built facility with dedicated education learning resources, including digital technologies
- Creation of a stable learning environment which operated separately from other areas of the centre
- Development of a program design which engaged learner interest, provided a variety of activities, catered to different learning styles, used digital technologies and provided progression pathways through Certificate III to the Tertiary Preparation Program
- Rigorous use of a Reflective Learning Journal by all students to reflect upon their learning achievements and any barriers experienced, together with comments about their progress/ learning activities. This was a conversational document between the student and teachers and an invaluable record of the learning journey
- Provision of learning incentives through an incremental performance-related pay scale matched to industry pay, administered by the CEO following an offender-learner's monthly review.

- Acknowledgment of educational achievement through a Graduation event which included participation of family and friends and the creation of a portfolio of each offender learner's best work, a copy of which is given to attending family/friends.

## appendix a.2: design brief

### Purpose of Intensive Learning Centre:

The purpose of the ILC is to provide excellent 21st century learning opportunities for offender learners in custody. The focus is on supporting the development of skills in literacy, numeracy, ICT, communication and also vocational skills (such as small motors, horticulture etc). The goal is to provide a supported, 'therapeutic' environment where intense, full-time collaborative learning takes place and ample opportunities for accreditation exist so that learners achieve a full Certificate qualification at levels I, II or III in 6-8 months. It is intended to prioritise young male adult offenders (aged 18-25) as the learning cohort.

### Profile of learners:

Offender learners present with multiple barriers to learning including (but not limited to):

- Disengagement
- Disaffection
- History of substance/alcohol misuse/abuse
- History of being abused
- Dysfunctional families
- Truancy from traditional/mainstream school
- Learning difficulties (high incidence of dyslexia)
- Low self-esteem
- Low levels of literacy/numeracy skills
- Anti-authoritarian attitudes
- They label themselves permanently 'I'm just a crim', 'I've got ADHD', 'I'm no good at maths'.
- Institutionalised

Initially, they can appear aggressive in class, because they fear the exposure of their perceived 'inadequacies'. They can lack resilience and want to give up easily. They don't believe they can complete anything. They don't believe they will amount to anything. It all can seem too hard. They can be change resistant.

### Design Brief:

We need our Intensive Learning Centre to not look like traditional school. We need it to be the sort of place that will foster 21st learning skills that have been identified as desirable by employers such as:

- creativity
- critical thinking
- communication
- ICT literacy
- citizenship
- personal and social responsibility
- problem solving
- decision making

In many ways this is antithetical to the regime of containment and security of a prison, however it fits in perfectly with the focus on rehabilitation and throughcare. We need these young men to feel engaged with their space, their teachers and each other. We need them to want to come every day and be excited to learn. We also need the staff to be excited to work in this environment and to think creatively about providing integrated learning experiences rather than teaching literacy/numeracy discretely.

We need learners to feel connected with their families and wider communities to promote citizenship.

We need them to feel safe to learn. We need them to feel empowered and encourage them to take ownership of their learning.

We need their learning spaces to support this. We need them to be dynamic and agile – to be flexible and easily changed as the activity requires.

We don't believe a 21st century learning space has been built within a maximum security prison anywhere in the world, with the possible exception of Norway. [Halden prison in Norway is regarded as the most humane prison in the world. The whole prison was purpose-built on the concept of meaningful activity to affect rehabilitation. Our aim would be to create a micro-version within an already built custodial environment.]

Key documents underpinning our ideas for the learning spaces are:

- Hilary Cottam, Buschow Henley, Matthew Horne, Grace Comely et al, Learning Works: The 21st Century Prison, (The Do Tank, London, 2002), p8.
- Learning Spaces Framework: Learning in an Online World, [http://www.mceecdya.edu.au/verve/\\_resources/ICT\\_LearningOnlineWorld-LearningSpacesFWork.pdf](http://www.mceecdya.edu.au/verve/_resources/ICT_LearningOnlineWorld-LearningSpacesFWork.pdf)

We have also been communicating with Professor Stephen Heppell around 21st century learning spaces, who has been providing us with useful advice.

### Basic requirements (not in any order):

1. 4 classrooms – interactive whiteboards in at least 2 classrooms, so flexible walls between classrooms to allow IWBs to be shared. Rooms need to be as large as possible, to fit at least 10 large adult learners. They should have internet connectivity for IWB. One of the classes should have cabling for ICT development – either via 10 desktop pcs or ports for 10 laptops.
2. 1 learning enrichment space – a communal multipurpose area for learning resources, some ICT facility, class space and peaceful space for learners. This area could possibly be used by learners at lunchtimes.
3. Learner toilets
4. Staff toilets
5. Interview room
6. Education Officer office
7. Staff work room (for 4 teachers – with internet connectivity, pcs/laptops/ phones)
8. Staff meals area – with small kitchenette, microwave, fridge, kettle etc.
9. Learner meals/tea/coffee point – microwave, hot water for tea/coffee, fridge.
10. Outdoor space that can be used at lunchtimes or as learning areas

11. Excellent ventilation

12. Excellent natural light

13. More money spent on fixtures and furniture than perhaps the building that may be more determined by security requirements such as straight lines of sight.

14. Space that can be easily reconfigured to be open, provide more quiet areas, be multipurpose and used for multiple purposes at the same time. 15. Flexible, comfortable furniture.

### The Build Site:

The agreed site is at the very heart of Mid-North Coast Correctional Centre, Kempsey, within 'The Circle' (a circle in the middle of the maximum security accommodation blocks). It will stand on what is currently a pair of basketball courts.

This is particularly exciting for us as the very location of the building places learning at the centre of the prison. Geographically, learning becomes the heart of the centre. It provides maximum access for offenders who simply need to be let out of their accommodation wing and only cross a track to get to the gate/fence of the Intensive Learning Centre.

However, the location also poses challenges as it is far away from fences and using cranes to life pre-fab buildings over the walls may be extremely expensive and possibly impractical.

This site and the programme within the eventual building have the power to not only transform the culture of this centre, but also the lives of the learners who pass through it and the wider communities to which they return. We can't understate how important we think having an engaging, innovative, dynamic yet safe building is to this overall process of rehabilitation.

Fiona McGregor

Project Officer: Education Development & Innovation

09/08/12



# appendix a.3: process performance: building

## 1. EVALUATION QUESTIONS

The key research question for the process performance evaluation is:

“Did the building process enable the efficient delivery of the project and the achievement of project objectives?”

Seven statements are articulated as a basis for examining the data against the main components of process performance:

1. The briefing document was concise and provided clear direction for the designers
2. The scope document clearly outlined the extent of the project and the available resources
3. The project governance was established to allow clear stakeholder relationships, communication mechanisms, timelines, and provision for project milestone sign-off
4. The design responded appropriately to the brief, scope and within governance
5. The construction process coincided with the procurement model
6. The delivery, installation, and site works were efficiently managed and met appropriate site management standards
7. Mechanisms were in place to identify and remediate defective works.

## 2. METHODOLOGY

The evaluation of the process performance was undertaken by Kevin Bradley, Architect and involves an amalgamation of interviews with teaching staff, and staff involved with the construction and installation of the ILC. The review recommendations reflect a combination these views, observations of the process as it happened.

## 3. PROCESS PERFORMANCE SUMMARY

This section present and summarizes the general findings obtained from the various research tools in this study. It includes reporting and findings specific to the different user and stakeholder groups. The information outlined in this section is used to respond to the process performance hypothesis in Section 4.

The Process review involved a number of interviews with CSNSW construction and project management staff to gain their insights to the issues experienced during the project. The interviews provide an insight to the project management and procurement for CSNSW small capital projects.

### The Brief

The brief was an aspirational document from the outset. This proved to benefit the conceptual thinking and the strength of the project. The management of the brief needs review so that subsequent stakeholders are aware of the intent of the brief and has mechanisms to incorporate change from their input.

### The Scope

The Scope has to be included for future ILC construction projects. The absence of a Scope document for the MNCCC lead to assumptions of accountancy and overlaps of roles.

### The Design

The design process was well accommodated throughout the project. Stakeholders that were not involved at the initial stages do need to be introduced and brought along with the journey. This is evidenced through the lesser understanding of why the buildings were designed as they were and now the under utilization of some of the program spaces designed into the classrooms.

### Construction

Construction issues were very much a mapping of the issues between construction delivery business units. Most of the construction issues were associated with the absence of a scope document and the subsequent tensions of accountability.

In the end, there was enormous goodwill displayed between business units to successfully deliver the ILC project.

### Site

The engagement of the main facilities management contractor, John Holland served the project well with regard to streamlining the construction process, particularly in the absence of a construction contract.

Issues with designing the site layout were associated with getting appropriate information to design with. There was no site survey, nor a survey of in ground services resulting in the incremental shifting of the module locations as site conditions were realized over time.

### Handover

There are significant issues with the completion of the project in terms of normal construction contractual sequencing. According to construction staff there has been no formal handover to the MNCCC. This includes no provision of a set of operational manuals, certificates, or warranties.

## 4. ASSESSMENT OF PROCESS PERFORMANCE

“Did the building process enable the efficient delivery of the project and the achievement of project objectives?”

Seven statements were articulated as a basis for examining the data against the main components of process performance. The result of the assessment of performance against these statements is reported here.

### 4.1 The briefing document was concise and provided clear direction for the designers

The brief was in itself aspirational, and provided a generous platform for the

designers to work from.

The following is extracted from the original briefing document that indicates CSNSW's thinking at the time of the DOC engagement:

- ‘We need our Intensive Learning Centre to not look like traditional school.’
- ‘We need these young men to feel engaged with their space, their teachers and each other. We need them to want to come every day and be excited to learn. We also need the staff to be excited to work in this environment and to think creatively about providing integrated learning experiences rather than teaching literacy/numeracy discretely.’
- ‘We need learners to feel connected with their families and wider communities to promote citizenship.’
- ‘We need them to feel safe to learn. We need them to feel empowered and encourage them to take ownership of their learning.’
- ‘We need their learning spaces to support this. We need them to be dynamic and agile – to be flexible and easily changed as the activity requires.’

This site and the programme within the eventual building have the power to not only transform the culture of this centre, but also the lives of the learners who pass through it and the wider communities to which they return. We can't understate how important we think having an engaging, innovative, dynamic yet safe building is to this overall process of rehabilitation.

Fiona McGregor

Project Officer: Education Development & Innovation

09/08/12

The brief was further developed through conversations with inmates and teachers at Wellington and Kempsey Correctional Centres. Further, inputs to the brief were noted during the site visits included:

(inmate) - Have the space culturally sensitive toward indigenous inmates, who are the majority

(inmate) - Fresh air “windows can be open for 8 months of the year”

(inmate) - Not looking onto razor wire. Windows looking high to see view but not onto something which will create distractions

(inmate) - Incorporate mentoring program where older/more skilled inmates teach less educated inmates

(inmate) - Incorporate a “Man Shed” for tinkering and fixing small motors etc.  
(teacher) - Need all weather lunch space

(teacher) - Interest was shown in having central “Hub” between all classes

(teacher) - Adequate storage within classrooms. Especially storage for student's artwork in pigeon holes/lockers

(teacher) - Separate staff and inmate entrance

(teacher) - Staff should feel comfortable and safe in their breakout areas, as the ILC will be a “home space” for them (full time)

(teacher) - No security cameras in classrooms – create passive surveillance.

## appendix a.3: process performance: building

(teacher) - Site lines, teacher should be able to see all inmates, be careful when creating smaller group work breaks out spaces, teachers are responsible for inmates during class.

(teacher) - More crossover between courses

(teacher) - Resource centre with second access point so it can be utilised by inmates who are not enrolled in ILC

(teacher) - Library to incorporate individual learning spaces

(teacher) - "Large squarish classrooms allow for various configurations of desks for differing tasks"

(teacher) - "Classrooms have walk-in storage spaces built into common walls"

(teacher) - Officer post has separate access to staff and inmate areas (teacher) - Buy ups area

(teacher) - Cater for 4 classes of 10 inmates

Information gathering for the POE included interviews with teaching staff and construction staff. Whilst the brief provided a clear landscape for the designers and had input from inmates and teachers, the interviews for the POE were largely conducted with individuals that were not present at the initial project briefing stage or the original interviews. It became apparent from the discussions with staff regarding the performance of the buildings and the construction process that there exists a disconnection between the original intent of the original brief and the ongoing expectations of the current staff.

The initial expectations of a dynamic 21st century teaching environment (3 points of interest, 3 teachers, no more than 3 walls – inside, outside teaching positions, classrooms that can interact with each other, yarn circle) are now only lightly acknowledged in the current teaching delivery. Spaces that were designed for quiet study are ignored, seen as a risk, or repurposed for storage. The discussions with teaching staff indicate a level of knowing how these spaces were to be used, but a reluctance to utilise the classrooms as they were imagined in the design.

Interviews with construction staff indicated a view of the brief, 'it was weak... it appeared to be a wish list rather than a formal brief to be developed with a project budget.'

**OUTCOME** - The briefing document and interviews did provide a clear direction for the designers, but was not as apparent to the construction staff, or more recently, the teaching staff. The uncomfortable relationship with the classroom spaces points to the brief needing to be managed and communicated throughout the life of the project and into the operational life of the Centre.

### Recommendations

Future ILC:

- formally re-document/re-issue the brief during the project.
- Centre the brief in Project Communication Plan (+ include the communication strategy in the overall Project Plan)
- Include provision for the Brief to inform the Scope document
- Re-document the Brief into a communication document for current and future MNCCC staff, learners, and visitors.

### 4.2. The scope document clearly outlined the extent of the project and the available resources

The scope document follows from the initial stages of brief development, concept design and feedback. It sets the parameters of the project. It addresses time, cost, quality, environmental consideration (site), resources, WHS/OHS, essential/nonessential services, and project contacts. It formally sets out the boundaries for the project to operate.

The interviews with CSNSW construction staff point to the absence of a Project Scope as having a strongly negative impact to the efficient delivery of the project. The following comments emphasises this, 'The scope was very unclear resulting in resources being diverted from other parts of the prison system to attend to work that was not identified in any scope documentation.' And, 'Contractors had no scope of work to work from resulting in quality issues with painting and finishes'.

The construction staff interviews reveal issues of control across the project and, again, appear attributable to there being no formal scope document to rely on. There were issues of who is responsible for what? The interviews indicated territorial overlaps and gaps that would otherwise have been identified in a scope document, leading to deliverables either being assumed as part of another's responsibility or the perception that responsibilities overlapped – in essence, seen to be treading in the wrong patch.

It became apparent, through the interviews, that there are views and opinions that emanate between business units towards each other, rather than a clear awareness of the roles in the project. Again, this points to the absence of the Scope and the significant reliance on known-ways to deliver the project. Whilst this had huge potential to be a destructive force to the project, a significant amount of goodwill was practiced on all sides to achieve a positive outcome. Even so, there remains a fair amount of misgivings between different construction business units, which to be fair on all sides, was really largely attributable to there being no scope document.

**OUTCOME** - The scope did not clearly outline the extent of the project and resources.

### Recommendations

Future ILC

- Engage a Project Manager at the very start of the project to oversee the entire process from the Brief, workshops to hand over.
- Write the Scope development and management into the role of the Project Manager.

The current ILC:

- Re-visit and write the Scope as a closure mechanism for the current ILC, and more importantly; for future ILCs.

### 4.3 The project governance was established to allow clear stakeholder relationships, communication mechanisms, timelines, and provision for project milestone sign-off

Project governance sets the framework for who the stakeholders are, who is involved and when, what actions are taken and by whom, if decisions are made – who is to make them and who has the authority to decide on them.,

The following is from observations were made during the project, and from interviews with construction staff. Project governance on this project appeared to map a way of how things are done in the CSNSW rather than following a project specific governance framework.

Project staff indicated in the interviews, 'the governance process was not apparent. What was to be produced, by who, who needed to be consulted, and who had authority to sign off wasn't well established.'

Observation from the within the project were:

- the governance model adopted for the project was PCG meetings, PCG minutes, joint presentations to senior staff and management for directional concurrence.
- Program and scheduling was discussed at PCG meetings as the project progressed
- Documentation and signoff (including stop/go decisions) were limited to meeting room presentations.
- Request for Information was not formally lodged, though, at times were tabled in the PCG and then responded to.

**OUTCOME** - The project governance was not formally established at the outset leading to issues of reporting and accountability. Whilst the project governance was apparent to CSNSW staff in a sense of how-things-were- done, it was not so clear to the other groups collaborating on the design.

### Recommendation

Future ILC:

- Establish governance framework, managed by a Project Manager where; signoff times and responsibilities, communication channels, decision- making mechanisms, and delivery protocol are administered.

The current ILC:

- No recommendation for the current ILC

## appendix a.3: process performance: building

### 4.4 The design responded appropriately to the brief, scope and within governance

All spaces indicated in the brief are included in the final design. In this regard, the design meets the brief. Further to the completion of the ILC, the following comments about the design are both from teachers and students.

- (teacher) Security – instances of hiding contraband in toilets
- (teacher) students are able to get on the module roof – it is thought that this has a lot to do with the attempts to pass contraband between A pod and B pod and the items falling into the gutters
- (teacher) small classrooms aren't being used
- (student) small classrooms are being used
- (teachers) would have preferred if there were male and female toilets
- (teachers and students) note there are wasps nesting in the space between the acoustic panels and the roof
- (teachers and students) question why the shade sail hasn't been installed
- (staff) the yarn circle isn't being used as it is too exposed
- (students) see the individual classrooms as their space. They do not like sharing or moving around
- (students) noted that there has only been limited opportunity for the whole centre to come together
- (students) sight lines into the toilets from outside is an issue

Further; issues around design and design procurement were expressed in the interviews with construction and site staff:

- 'Overseers should be involved at the design development stage to identify site-specific issues that would head off issues with the design.'
- ' stops and sign-off that relate back to scope documentation and design staging'

**OUTCOME** – The design meets the initial brief. Subsequent issues with the design identified by the teachers need to be assessed and incorporated into future briefing documents.

#### Recommendation

Future ILC:

- Set up construction and site personnel as part of the design review team
- Allow specific feedback from security on module design before construction documentation

The current ILC:

- No recommendation for the current ILC

### 4.5. The construction process coincided with the procurement model

The procurement model was almost entirely in house within CSNSW. The method of utilizing prefabricated systems was made early in the project. The model included prefabricated units constructed at St Heliers Correctional Centre, transported by road transport to MNCC, and installed under CSNSW construction management supervision. In this context; the construction process coincided with the procurement model.

### 4.6 The delivery, installation, and site works were efficiently managed and met appropriate site management standards

The following comments relate to site construction and are from interviews with construction staff and management:

- There was overlap experienced around expectations of who was responsible for finishing what. This has previously been expressed in the Scope section, but was mentioned in interview in this part as well.
- There was pressure to deliver modules only to have delays in installation.
- In ground services were discovered during the site works and late in the design documentation. This impacted on the siting of the modules and impacted on the quality of the central gathering space by reducing its size. • The site works were completed with assistance from the construction, maintenance firm John Holland as they had full knowledge of where services were and where to break into them.
- John Holland have the right clearances and protocols for working in a jail. The engagement of John Holland for the site works appeared appropriate for this project at this time. The issues experienced with the overlap in the site works between CSNSW business units appears to have been significantly dealt with in the engagement of John Holland through utilizing their knowledge of the building systems and security clearance.

**OUTCOME** – There were issues with The delivery, installation, and site works in an ILC. Some of these issues were experienced during the site works where modules moved in plan as the actual positioning of in-ground services were determined.

#### Recommendation

Future ILC:

- Embed contract provisions that allow for the prison environment for future construction contracts.

Engage a surveyor to provide information that is critical for the design of an ILC. Including in ground services.

- establish a project plan that is updated and presented at Project Control Groups.

The current ILC:

- No recommendation for the current ILC

### 4.7 Mechanisms were in place to identify and remediate defective works

The issue with whether there was mechanism for defective work needs to be considered in the larger context of handing the project over at Practical Completion, after which defects can be identified and rectified in accordance with the construction contract provisions. The following are comments from construction staff with regards to the defects liability period. There was no formal handover of the modules to MNCCC or the Client. There was no contractual provision for handover, or Practical Completion. The project was effectively left open ended and only really being 'handed – over' when the Centre simply opened.

There was no provision for defects rectification or liability period.

There are no maintenance manuals (as built drawings, manuals, material certification, consultants certifications, defects list) (note: these are traditionally compiled and given to the contract administrator at the point of handover)

(observation by Kevin Bradley) – it is not actually clear if the project has been transferred to the maintenance program of MNCCC.

**OUTCOME** – There was no scheduled or completed formal handover according to construction staff. DOC staff has identified defects and these are included in the Technical components of the POE and should be read in conjunction with any other defects.

#### Recommendation

Future ILC:

- Ensure contract provisions that allow for Practical Completion, Handover, and Defects Liability.

The current ILC:

- Assemble all manuals that were due at handover and give a copy to John Holland
- Complete normal contract practice procedures including –
  - \* As built drawings
  - \* Remediation of defects



## appendix a.4: process performance: furniture

The processing and production of the ILC furniture was project managed at South Coast Correctional Centre (SCCC). With Stuart Hartley (CSI Contracts Manager) managing the initial order and costing and David Rickwood (SCCC Senior Overseer) processing the order and managing production and logistics. This evaluation covered the work undertaken at SCCC which consisted of the majority. No issues were reported from the other centres.

Production locations:

- South Coast: Joinery (Particle board, timber, laminate), product assembly  
Wellington: Steel fabrication
- John Morony: Steel Powdercoating, galvanising  
Dillwynia: Sheet metal
- Mid North Coast: Foam and upholstery

### Project management and order processing:

Particular advantages:

It was suggested that the meeting between DOC, CSNSW and SCCC which was scheduled to work through the preliminary designs and resolve technical resolution was one of the main factors which contributed to easy of production. This offered the following advantages:

- Provided the business unit with clear indication of the pending job (which lead to initial project planned and material ordering)
- Offered opportunity to provide design input and production expertise – suggestions were incorporated into the design which afforded more efficient production
- Valuable conversation in regards to product requirements and business unit's capabilities (equipment and skill level)
- The client drawings were considered to be clear and concise. The level of technical resolution contributed to ease of processing and production. This was appreciated as orders can often include rough sketches only, which leaves design interpretation and technical resolution up to the overseer.

Challenges:

The order needed to pass through a few sets of hands to deliver the pricing, this slowed the process slightly.

Pricing was being calculated simultaneously to design resolution.

Consequently, as items changed or were deleted the costing required multiple amendments.

It was expressed that these were minor issues and typical to most projects.

### Material usage:

All materials were within working capabilities.

No issues in ordering, all arrived within standard 10 day delivery time.

The project required the introduction of one new material, recycled PE. This was cut on the CNC router, it required a number of test runs to improve cut quality however the team quickly adjusted.

### Production and assembly:

Approximately 20 inmates involved. Production teams were managed in small groups, with a more experienced or capable inmate acting as a 'leading hand' within each group

The work contributed to training numerous inmates in certificate 2 & 3 in furniture production. Of the 20 inmate involved 3 were engaged in apprenticeships and 3 in traineeships.

Inmates typically work for 4-5 hours a day for 4 days a week. Then a half day on Friday. Lock ins are a usual challenge. Overall the process ran smoothly.

Particular advantages:

Good combination of box construction (which afforded efficiency) and complex design (which provided a welcoming challenge for inmates, particularly those engaged in traineeships).

The Overseer's extensive technical knowledge (having worked as a shop fitter for 20 years) allowed for clear process demonstration and additional design resolution.

Challenges:

Small changes made to handle and castor specs due to product availability

A slight reconfigure of the working wall pelmet (top box) to allow fixtures to be concealed.

All issues were easily resolved through email or telephone conversations between the overseer and the designer.

### Logistics:

Completed items were stacked onto pallets and wrapped. Approx. 50 pallets in total.

Wrapped pallets were manoeuvred with pallet jacks, fork lifts and trailers.

Challenges:

- Storage proved to be the biggest challenge throughout the project.
- There was insufficient storage space to house the completed units at SCCC prior to dispatch. Consequently, items were wrapped onto pallets and stored on the workshop floor. This posed the following challenges:
  - Safety and security (primarily regarding sightlines within the workshop)
  - Ease of workflow (moving through the space, access to materials)
  - Scheduling (staggering the production of additional units to reduce pressure on storage and dispatch)
- It was indicated that this is an ongoing challenge and could be alleviated by a storage shed being attached to the workshop.
- In some cases there was considerable product movement between centres. For example the steel was processed at Wellington, then transported to John Morony for powdercoating, then to logistics at John Morony, then to SCCC for assembly, then to MNC for installation.

### Installation:

Managed by SCCC overseer onsite at MNC, directing small teams of inmates. Generally ran smoothly, completed in two days.

Challenges:

During installation it became evident that two of the teacher's desks needed to be mirrored. Four right hand desks were produced instead of two left hand and two right hand. This was an oversight on the designer's behalf, which could have been avoided by a more structured handover process, with a number of other parties checking the drawings before sign off.

The front workbenches were the wrong length and were installed in the wrong position. This occurred as instruction was provided to fabricate the bench to fit the classroom window alcove (to be measured post module construction). There was a miscommunication and the outside window alcove was measured instead of the inside one. This primarily resulted from installation being managed by the furniture production overseer who had not previously been engaged in layout planning, it could have been avoided by the provision of a furniture layout plan, the potential for the designer to be onsite, or by clearer direction provided by the project manager who had been involved in furniture layout discussions.



# appendix a.5: technical performance: building

## 1. EVALUATION QUESTIONS

Drawing on the building evaluation literature, we specify the key research question as:

“Does the ILC facility meet the relevant physical systems, environmental systems and design & construction quality standards?”

Four statements are also articulated as a basis for examining the data against the main components of technical performance:

- The physical systems for lighting, heating, ventilation and acoustics meet or exceed the relevant standards
- The environmental systems for energy consumption, water consumption and CO2 output meet or exceed the relevant standards
- The building facility has the capacity to accommodate and adapt to a range of foreseeable future uses
- The quality and robustness of the main buildings and fixtures is to commercial industry standard

## 2. ASSESSMENT METHODS

Physical systems for lighting, heating, ventilation and acoustics. Assessment of the physical systems relies heavily on the original consultant design intent. The ILC has not operated at full capacity for more the 12 months and this would be the minimum data required to make comment. Comment at this point of time is based on the original consultant design and observations from site visits.

Environmental systems for energy consumption, water consumption and CO2 output. Similarly to the methods for the physical systems, reliable data would require recording of the centre operating at full capacity over at least the period of a year. There is no data to provide an informed view of the ILC energy consumption.

Adapt to a range of foreseeable future uses. The foreseeable use for the ILC buildings is for them to retain their function and be relocated to another site. Whilst this is possible, but not a consideration in the foreseeable future, the design of the standard sized modules is the basis for any observations of the buildings' capacity for adaptable reuse.

Quality and robustness of the main buildings and fixtures

The research method for determining the extent of the quality and robustness of the buildings and fixtures was through interviews with construction staff, site staff, and site visits.

The quality and robustness of the MNCCC ILC buildings were assessed in relation to overall quality. The buildings were considered as having, 'inside' and 'outside' components.

Internal quality considerations:

- Ceiling and acoustic linings
- Walls and surfaces
- Floor coverings
- Doors windows and hardware
- Deviation from design

External quality considerations:

- Roof cladding and flashings
- All cladding and finishes
- Windows and doors
- Decking
- Deviation from design

## 3. TECHNICAL PERFORMANCE SUMMARY

“Does the ILC facility meet the relevant physical systems, environmental systems and design & construction quality standards?”

In general, the ILC facility achieves appropriate levels of quality. The following outlines findings that relate to the technical performance of the ILC and some of the information required to realize the on going operational performance.

Physical systems for lighting, heating, ventilation and acoustics.

- Natural lighting in the classrooms is of acceptable quality and strength.
- Acoustic treatment to the classrooms appears to be effective in assisting intelligible speech.
- Ventilation is appropriate, but appropriate thermal comfort (particularly in winter) has not been achieved resulting in the installation of airconditioning.

Environmental systems for energy consumption, water consumption and CO2 output

- There isn't any data available for energy consumption and this cannot be commented on.

Adapt to a range of foreseeable future uses

- The classrooms have been designed to offer multiple methods of program delivery. More information is available on the effectiveness of this design in the body of the main POE report.
- The construction capacity for reuse is embedded in the chassis design. The use of a single size module that can be applied as a number of functions offers a high degree of flexibility.

## Building quality assessment

The general build quality of the MNCCC ILC is of an appropriate quality. There are some issues around finishes not being completed to specification, but none of these shortfalls impact on the daily operation of the centre and are minor works to rectify.

## 4. ASSESSMENT OF TECHNICAL PERFORMANCE

### 4.1 The physical systems for lighting, heating, ventilation and acoustics meet or exceed the relevant standards

Further to meeting standards, the initial brief and interviews with staff and inmates pointed to the environmental aspirations for the Centre:

(Brief) Excellent ventilation (Brief) Excellent natural light

(Inmate) - Fresh air “windows can be open for 8 months of the year” Lighting Lighting -

The modules were designed in conjunction with a lighting manufacturer to achieve minimum lighting levels for classrooms and workspaces. The

lighting is designed for an average of 280lux. This exceeds the Australian Standard AS1680.2.3, Specific Recommendation For Educational And Training Facilities. Further to the designed lighting, the classrooms exhibit high levels of natural light, offering very good lux levels for all tasks.

There have been some comments around glare in the office. Blinds have since been introduced to address this.

There is feedback from learners that there is some glare associated with the IWBs. This looks to be attributable to the positioning of a light fitting in close proximity to the IWB.

Heating and ventilation -

Mechanical heating and cooling were not included as part of the initial design. The drivers for this were both environmental and financial. The position was taken to see how the buildings would perform thermally over time and then make the decision to install air conditioning later if need based on feedback from learners and teachers. Data loggers were employed to record the temperatures to assess thermal comfort. It appears that information from this intervention was corrupted with the use of heating appliances in the classrooms. High temperatures were recorded in the winter.

The modules were designed to the deem-to-satisfy provision applying to building envelop of a class 9 building in National Construction Code (VolumeOneEnergyEfficiencyProvisionsSection J.)

## appendix a.5: technical performance: building

### Acoustics -

The acoustics for the classrooms were assessed and designed by acoustic engineers, Acoustic Logic. The classrooms have an acoustic panel system to the soffit to control the reverberation in the space and to enhance speech intelligibility between teacher and class, and between learner groups.

The following recommendations of Acoustic Logic take into account the proposed finishes:

- Install absorptive lining to the soffit of the classroom, with the absorptive lining to be distributed evenly around the room. Treatment to be as follows:
- 65% of the total ceiling area covered with 1 inch Fabri-Trak (NRC 0.8) distributed in Australia by Sontext. Note: This system is particularly designed for curved or unusually shaped surfaces.

Reverberation has not been tested since construction. The quality of the sound and speech intelligibility has been observed during a number of site visits by UTS staff as being very good.

There have been observations by the staff that there is a significant amount of noise penetration during heavy rain events. This was also observed during the first learner graduation event where a heavy downpour was experienced during speeches and impacted on the ability to hear the person speaking.

Other parts of the ILC were not considered for acoustic treatment due to cost implications.

There were issues with the acoustic panel fixing system. Some panels came loose and were in danger of falling. This issue was fixed by using a secondary fixing system.

### Recommendations

The future ILC:

- Incorporate all room components in a lighting design concept so that glare to IWBs or other equipment is not produced.
- Provide detailed thermal modeling of classrooms and other spaces other than compliance with the National Construction Code
- Seek design solutions for heavy rain events as part of the acoustic consideration
- Seek better panel fixing systems from the manufacturers for a horizontal surface.

The current ILC:

Monitor the issue with the glare on the IWB. If the issue persists, contact MNCCC facility contractor to see if it is possible to relocate the light fitting away from the IWB. – a short term fix could be to remove the starter unit to the offending light fitting if the glare is a significant issue.

### 4.2 The environmental systems for energy consumption, water consumption and CO2 output meet or exceed the relevant standards

The ILC is now embedded as part of the MNCCC facility. The ILC has operated for just over a year, and only recently at full student capacity. Consumption data for energy, water, and CO2 is not available for this report.

#### Recommendations

The future ILC:

- Ensure that a new ILC is appropriately interfaced with the prison energy infrastructure to allow for data logging of energy use.

The current ILC

- Undertake energy use data logging to profile energy use now that the ILC is at capacity and has the heating and cooling systems in place.

### 4.3 The building facility has the capacity to accommodate and adapt to a range of foreseeable future uses

The initial brief and interviews with staff and inmates pointed to the functional aspirations for the Centre:

(Brief) outdoor space that can be used at lunchtimes or as learning areas  
(Brief) space that can be easily reconfigured to be open, provide more quiet areas, be multipurpose and used for multiple purposes at the same time.

(Brief) Library facilities accessible by inmates off the “main circle”. (teacher) - Need all weather lunch space

(teacher) - central “Hub” between all classes

Functional flexibility - The design for the functional layout of the classrooms reference Professor Stephen Heppell’s concept of the Rule of Three -

one: never more than three walls

two: no fewer than three points of focus

three: always able to accommodate at least three teachers, three classes.

Construction flexibility - All the modules, with the exception of the amenities and library, are constructed to the same chassis size. The effect of this standardized system is the application of the chassis standard regardless of function to a site in the early design process. The thinking has already been done. It is then a matter of which function and orientation is appropriate for a particular system.

The prefabricated modules can be relocated to another site as an ILC or alternative use.

#### Recommendations

The future ILC:

- Engage with future learners and teachers to better understand the functional flexibility on any future ILC projects
- Look to adapt all buildings to fit onto the one chassis size.

The current ILC

- Revisit the design of the smaller spaces in the classrooms with teachers and education management.

### 4.4 Building Quality Assessment

Overall quality of construction.

The general quality of construction and robustness is of appropriate industry standard





## appendix a.5: technical performance: building



### EXTERNAL QUALITY

Defects and issues:

#### View lines to male toilet

Direct views into the toilet that were identified as an issue during interviews with ILC learners. The final position of the toilet/utility module was impacted by the late knowledge of in ground services positions later in the construction program. The in ground services pushed the utility module forward from the fence line resulting in the door opening being more visible from the classroom entries.



### Roof cladding and flashings

Some buckling of the roof flashings was observed in a couple of the modules. The cause of this isn't clear, but is expected to damage associated with crane lifting of the modules. None of the damage

Some buckling of the roof flashings was observed in a couple of the modules. The cause of this isn't clear, but is expected to damage associated with crane lifting of the modules. None of the damage looked severe enough to negatively impact on the performance of the flashing, but should be checked.



## appendix a.5: technical performance: building

### External cladding and finishes

Some buckling of the external wall cladding was observed. This looks to be a construction quality issue (though could also be associated with transportation). Further evidence of bulging cladding should be identified and fixed down.



### Paint finish

The quality of paint finish is generally acceptable.

Issues arise with quality of the paint finish where there is a change of material. Paint overruns are evident in a number of locations.

The ILC painting concept that was presented to CSNSW wasn't followed in the final installation. DOC considers this to be a significant aspect of the ILC concept with respect to 'designing beyond the walls'.



### Decking

The deck finish exhibits an advanced deterioration due to sun and weather exposure. Clearly, the original finish does not meet the serviceability expectations of the ILC and other coating products should be researched and considered. The life expectancy of any decking finish will likely be enhanced with the introduction of a shade structure.





# appendix a.5: technical performance: building

## INTERNAL QUALITY

Overall quality of construction.

The general quality of construction and robustness is of appropriate industry standard.



Defects and issues:

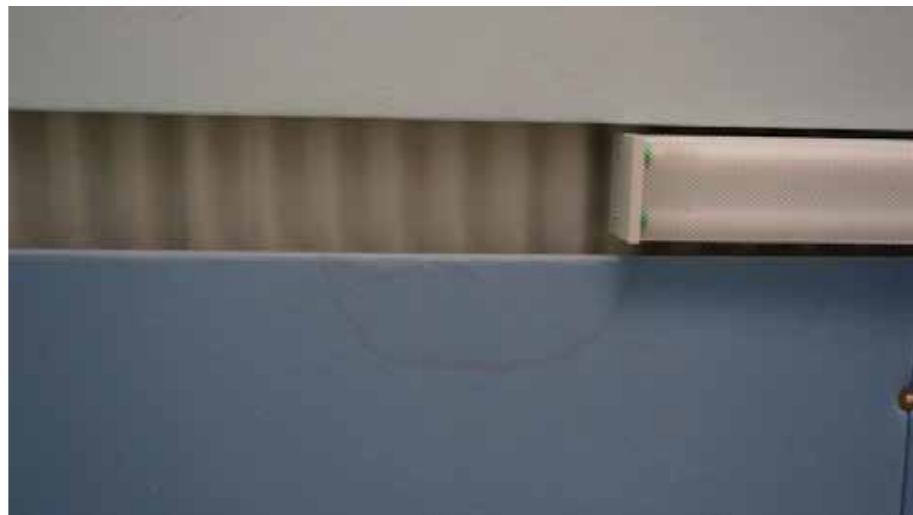
## Ceiling and acoustic linings

Overall quality of construction.

The general quality of construction and robustness is of appropriate industry standard.



Staining to acoustic panelling. This is likely associated with the wasp issue identified in interviews with the learners. The wasps build mud nests between the roofing material and the acoustic panel that looks to be the cause of the staining



## Walls and surfaces

Poor positioning of teacher's desk data and power outlets.



## appendix a.5: technical performance: building

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### Floor coverings

Watermarks on the floor coverings look to have locally degraded the floor finish. Re-coating in the affected areas should be considered if not already addressed



# appendix a.6: technical performance: furniture

## 1. EVALUATION QUESTIONS

Drawing on the building evaluation literature, we specify the key research question as:

“Does the ILC facility meet the relevant physical systems, environmental systems and design & construction quality standards?”

Four statements are also articulated as a basis for examining the data against the main components of technical performance:

- The physical systems for lighting, heating, ventilation and acoustics meet or exceed the relevant standards
- The environmental systems for energy consumption, water consumption and CO2 output meet or exceed the relevant standards
- The building facility has the capacity to accommodate and adapt to a range of foreseeable future uses
- The quality and robustness of the main buildings and fixtures is to commercial industry standard

## 2. ASSESSMENT METHODS

The MNC ILC prototype furniture was assessed in relation to overall quality and its ability to perform its desired function. A range of design considerations were addressed in order to identify manufacturing and installation defects.

Design Quality considerations:

1. Function – Basic ability to fulfil intended function
2. Aesthetics – true to specified design, colour, line, shape, form, proportion, style, texture, balance
3. Material – suitability, integrity, stability, flex, thickness, lamination, surface hardness, deformation
4. Surface finish – scratches, dents, dirt, finishing, paint chipping, glue marks
5. Assembly – strength and stability, accuracy, fastener suitability, tightness
6. Mechanisms – calibration, operation and reliability of moving parts
7. Structural integrity – strength, flex, vibration, stability, fracture, load test
8. Durability – robustness, surface hardness, quality of assembly, vandal resistance
9. Ease of maintenance – cleaning, ease of disassembly/repair, access to fasteners
10. Safety – sharp edges or corners, pinch points, weight, balance, possible miss-use
11. Stackability/Nestability – handling and fit
12. Ergonomics – anthropometrics, consideration of intended users, size, weight, manoeuvrability
13. Sustainability – material selection, material usage, assembly method, durability
14. Fit for purpose – suitability for intended context, use and users
15. Installation – suitable location and fixture

Methods referenced:

- Product Quality Assurance (QA)
- Design for Reliability (DfR)
- Design for Assembly (DfA)
- Design for Sustainability (DfS)
- Industrial Design process: Contributing factors
- AS/NZS 4610.2:1999 - School and educational, Part 2: Chairs - Strength, durability and stability
- AS/NZS 4610.3:1999 - Furniture—School and educational, Part 3: Tables and storage furniture –

## 3. TECHNICAL PERFORMANCE SUMMARY

Working wall:

- Generally the construction of the working wall was of a high quality, the units were appropriately assembled and surface finish was reasonable. There were a number of small issues with assembly quality including handles being mounted upside down, handle rebates being overcut and bookshelf edging de-laminating.
- In relation to wear and durability a number of large doors warped after 1 year and some of the whiteboards were difficult to clean.
- Working wall trolley:
- Construction quality was high, however surface finish was poor, with the presence of glue marks and dirt. Aesthetically, a number of edges were routed which were not specified and functionally the bottom wheels were mounted too far in from bottom edge, restricting access to wheel lock lever.

Working wall dolly:

- Of suitable quality

Teacher's desk:

- Individual elements of the teachers desk were of a high quality, however as it was one of the more challenging items for assembly (multiple parts and irregular angles) some of the assembly details needed improvement.
- The edge of modesty panel join protruding corner radius on table top, gaps in mounting brackets and visible putty in some joins. The handles in the top draws were also fixed upside down.
- The veneer on the first two modesty panels were of particular high quality, however the veneer on the two reconstructed tables (after two opposite hand tables were needed) were of a lower quality.

Filing cabinet:

- Overall the construction and assembly was moderate. Individual components were robust and joinery rigid however assembly of moving parts need higher calibration. Some of the draws jammed and access to wheel lock levers was difficult.
- One draw handle also came off, higher strength adhesive or screws are needed.

Learner's desk:

- Construction and assembly was generally of a high quality, especially in regards to the complexity of the angles. A few small defects were identified, including surface finishing details (assembly marks and burrs on routed edging) and the need for locknuts on castors.

Common table:

- High quality, with the exception of a few small gaps in the mounding of black edging.

Soft seat:

- Aesthetically the side profile differed from the specified shape, and the specified black vinyl on bases were missing. Besides that the construction quality and upholstery was of a high quality.

Ottoman:

- Of suitable quality

Ottoman table:

- Of suitable quality

Front bench:

- Construction and assembly was robust and to of a high surface finish. The tables were constructed to the wrong length, due to miscommunications between on-site construction workers.

Library staff desk:

- Of suitable quality

Library book return trolley:

- Of suitable quality

Learner library computer table:

- Of suitable quality

Round library table:

- Of suitable quality

Meeting table:

- Of suitable quality. Legs were missing stabilising caps.

Above desk pin board:

- Of suitable quality

Above desk shelves:

- Of suitable quality. Fastener caps missing from some screws

Outdoor storage unit:

- Of suitable quality. Art panels bowed

Outdoor high table:

- Of suitable quality

3 In 1 picnic tables:

- Of suitable quality



# appendix a.6: technical performance: furniture

## 4. FURNITURE QUALITY ASSESSMENT

### Working wall

#### Function:

1.1 IWB manufacturer's recommended mounting height is too low for tall teachers. IWB needs to be raised and additional mounting box fabricated for projector

1.2 Electrical panel needed to access wiring behind IWB

#### Aesthetics:

1.3 IWB mounting module join needs to be wider to accommodate speaker side mounting. (speakers were specified to be mounted above IWB however this would restrict access to volume control)

#### 1.4 Assembly:

Door handles mounted upside down

1.5 Router overcut on handle recess

1.6 Edge laminate on side bookshelf delaminating

#### 1.7 Durability:

Large Doors warped after 12 months

### Working Wall Trolley

#### Aesthetics:

2.1 Inside edges of shelf cavity were not specified to be routed

#### Surface finish:

2.2 Glue marks and dirt

#### Assembly:

2.3 Wheels mounted too far in from bottom edge, restricting access to wheel lock lever

### Teacher's Desk

#### Aesthetics:

3.1 Plywood modesty panel in amended table, mismatches specified veneer

3.2 Visible putty in modesty panel join

#### Surface finish:

3.3 Glue marks and dirt

#### Assembly:

3.4 Edge of modesty panel join protruding table top

3.5 Gap in storage box mounting bracket on one table

3.6 Top draw dandle upside down

#### Installation:

3.7 Corner of one table damaged during handling





## appendix a.6: technical performance: furniture

### Filing cabinet

#### Aesthetics:

4.1 Corner radius on box edge doesn't match radius on draw front

#### Assembly:

4.2 Some of the bottom draws stick on top draws when closing (not enough clearance between draws)

4.3 One of the draw handles came off, need higher strength adhesive or screws

4.4 Wheels mounted too far in from bottom edge, restricting access to wheel lock lever

### Learner's Desk

#### Surface finish:

5.1 Corners need light sand to remove router burrs

5.2 Assembly pen marks visible on table top

#### Assembly:

5.3 Small gaps between some top panels

5.4 Some wheel nuts loose. Need fastening with locknuts.

#### Stability:

5.5 Downward pressure on edge of curve may lift back legs



### Common Table

#### Assembly:

6.1 Gaps in edge bumpers, requires flush mounting

### Soft Seat

#### Aesthetics:

7.1 Side profile form differs from specified shape

#### Material:

7.2 Specified black Vinyl on bases missing



## appendix a.6: technical performance: furniture

### Ottoman Table

Nestability:

8.1 Needs to be higher to allow more clearance for ottomans to nest under table

### Front Bench

Aesthetics:

9.1 Wrong length (wrong window alcove measured)

Installation:

9.2 Wrong location (wrong window alcove)

### Meeting table

Stability:

10.1 Table rocks, missing stabilising caps on feet.



### Above desk shelves

Assembly:

11.1 Fastener caps falling off



### Outdoor Storage unit

Assembly:

12.1 Art panels bowed





## appendix a.7: alternate outdoor seating plan



### ILC PICNIC TABLES

As can be seen in the layout, the current planter/bench in the centre of the courtyard would need to be removed to make space for the picnic tables.

The seats should be aligned north/south so that inmates can sit in view of entrances on either side. This would provide them with a little sense of ease.

# appendix a.8: safe hot water system concepts

## SAFE HOT WATER USE IN THE ILC

### REQUIREMENTS:

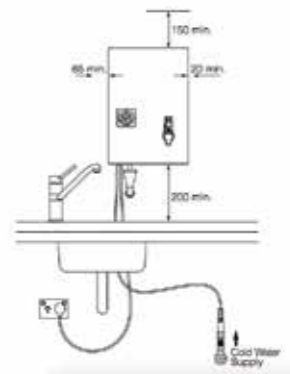
- \* Adequate water quantity.
- \* Inability to fill buckets.
- \* Coffee for focus and ease in the mornings.
- \* Avoidance of water overflow.
- \* Possible timer for hot water use to be slowed.

What's the difference if the tap has continuous flow, and the inmate merely fills a bucket up using a cup to refill it?

This cannot be absolutely avoided, but of the available options, slow output of boiling water would deter bulk bucket filling.



Shelf could be placed under current outlet. By adding an extra outlet, the quantity of water provided would be increased. (7.5L device for \$1300). By having a shelf underneath the outlet, nothing larger than a cup could be filled up.



Further research reveals this technical drawing specifying that the minimum distance between the outlet and the counter is 200mm, meaning that the tap is even higher, approximately 250mm.



Best option is the Zip HydroTap Industrial, Side-Touch, with "font kit". This model is made specifically for custodial centres, with the font kit plumbing through to waste and allowing only certain sizes of vessels, by installing on any flat surface. (Approximate price \$6800).

### Benefits:

- \* Slower output of hot water.
- \* Raised "font kit" shelf to prevent direct filling of buckets.
- \* Heavy duty tapered base.
- \* Safety button to prevent accidental boiling water usage.



## OTHER OPPORTUNITIES:

Apart from the shelf placed under the water boiler, there are a few other options that were considered but were mainly fruitless.



This option prevents the filling of buckets to an extent but the metal rack could be removed and used as a weapon hence this option is not appropriate.



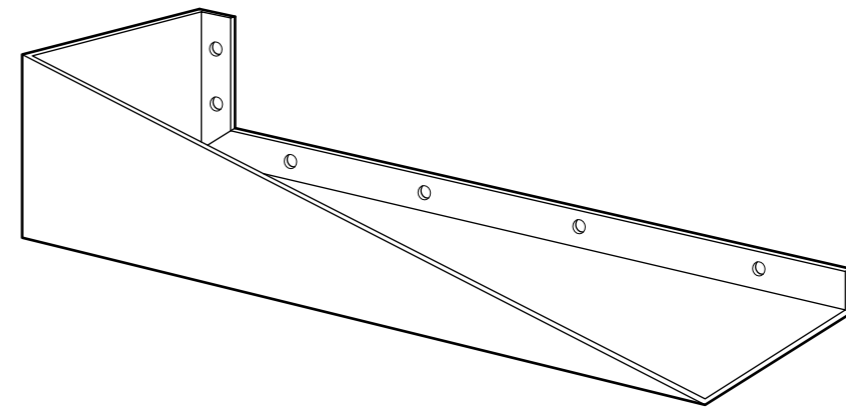
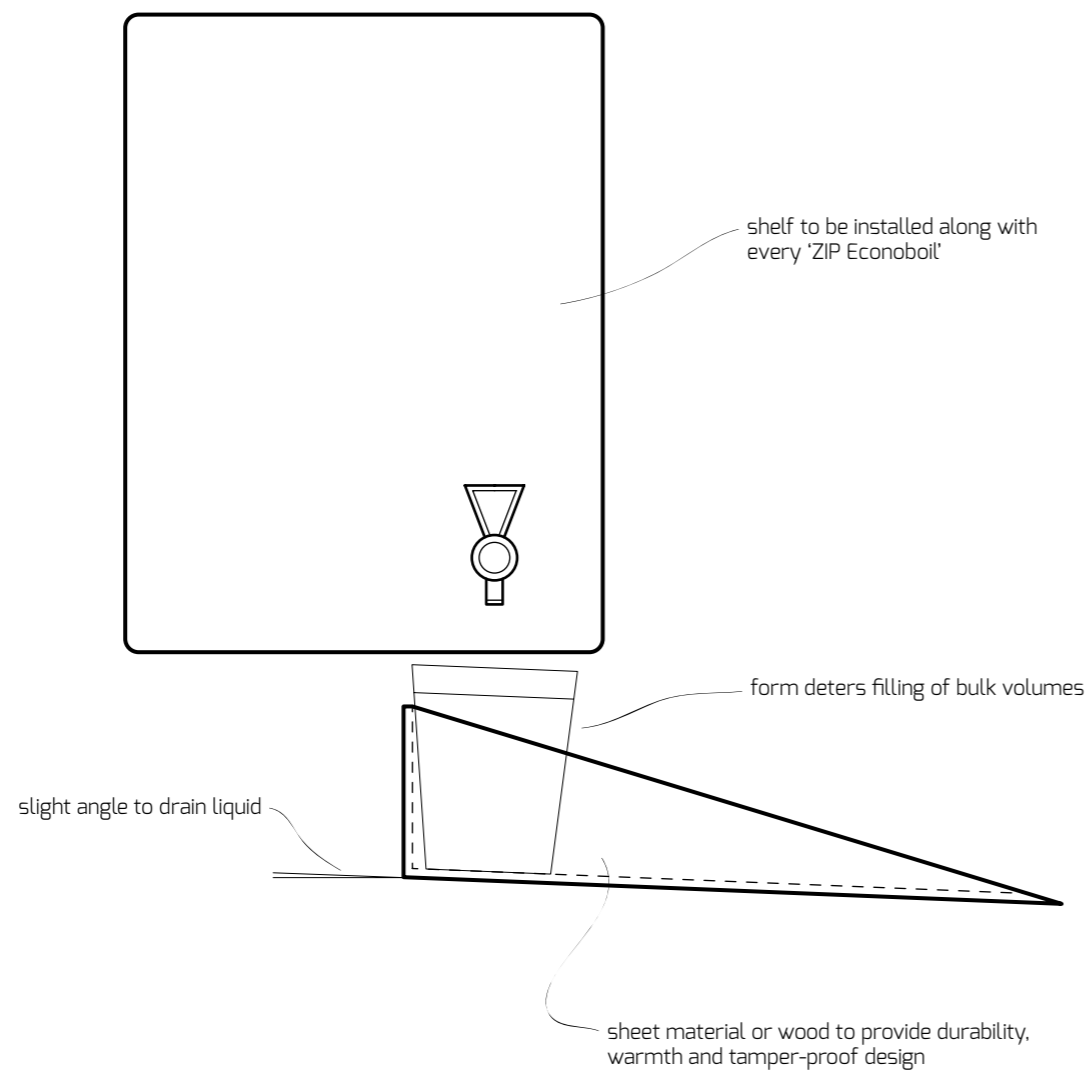
This drip tray could act to block the action of buckets being placed under the tap. Even if the boiler is placed right at the back of the counter however, there is still some angle left for big containers to be placed under the tap.



Water dispensers such as these necessitate the removal of the 'Zip' ones already installed in order to install these. That could be a costly and unnecessary venture. However their design presents elements that could be incorporated into potential designs of a cabinet. A cabinet would contain the water dispenser in a way such that the tap was in a cavity like in the image to the left. The cabinet could also be used to house tea bags, sugar, coffee, cups etc.



## SHELF DESIGN



## appendix a.9: additional design recommendations

### OVERALL

Item/area	Suggested changes	Requiring amendment at MNCCC
Size and location	<ul style="list-style-type: none"> <li>A large overall space would be valuable, like on the oval</li> <li>Closer physical connection to other program spaces and industry units, allowing easier moving between facilities, for the purpose of integrated learning</li> </ul>	
Locks	<ul style="list-style-type: none"> <li>Standardise locks with the rest of the correctional facility</li> </ul>	

### CLASSROOM

Item/area	Suggested changes	Requiring amendment at MNCCC
Classroom Desks	<ul style="list-style-type: none"> <li>Form changed to trapeze</li> <li>Locknut specified for wheel</li> </ul>	
Working Wall	<ul style="list-style-type: none"> <li>Raise IWB (make small box to mount raised projector)</li> <li>Remove large tub trolley, it's not being utilised (The base may also pose as risk as being used as a weapon. If it is to stay it should be screwed to the bottom box)</li> <li>Increase width of IWB mount panel to speakers do not protrude when mounted on side of IWB</li> <li>Power chord access panel needed inside cupboard</li> <li>Cupboard doors smaller and thicker to prevent warping</li> <li>Reduce bulk behind IWB – without impacting depth of teacher's desk</li> <li>More accessible storage around teachers desk</li> <li>Follow up with whiteboard material specs to improve ability to clean</li> <li>Re-purpose cleaning cupboard to store classroom materials</li> <li>Potentially provide additional surface for teaching material</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> </ul>
Soft seating area	<ul style="list-style-type: none"> <li>Increase size</li> <li>More shelving</li> <li>Vinyl on seat bases</li> <li>Cable ties on all zips</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> </ul>
Stand up benches	<ul style="list-style-type: none"> <li>Include in classroom – either as originally specified (on either side of the front window) or in the area where the quiet room is</li> </ul>	
Desk at entrance	<ul style="list-style-type: none"> <li>Lower to be a seated table height, allowing one student to sit and work within teacher's site</li> </ul>	
Operable wall	<ul style="list-style-type: none"> <li>Lockable</li> </ul>	

## appendix a.9: additional design recommendations

### Additional design recommendations

#### TEACHER SPACE

Item/area	Suggested changes	Requiring amendment at MNCC
Overall	<ul style="list-style-type: none"> <li>Increase overall floor plan size. It depends on the number of staff but the current space would benefit almost doubling in size</li> </ul>	
Door latch	<ul style="list-style-type: none"> <li>Specify a handle on the front door which can be locked with a hand latch, not a key.</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> </ul>
Workstations	<ul style="list-style-type: none"> <li>Provide larger workstations</li> <li>Ergonomic chairs</li> </ul>	
Above desk storage	<ul style="list-style-type: none"> <li>Raise windows above head height</li> <li>Install above desk shelving</li> </ul>	
Storage	<ul style="list-style-type: none"> <li>Increase storage, specifically design archive areas for different certificate levels</li> <li>Open bookshelves for folders</li> </ul>	
Work preparation area	<ul style="list-style-type: none"> <li>Larger benched area to facilitate class preparation</li> </ul>	
Photocopiers	<ul style="list-style-type: none"> <li>Segregated photocopier area that is away from work area</li> </ul>	
Toilet	<ul style="list-style-type: none"> <li>Specify soap dispenser and paper towel holder</li> <li>Separate male and female toilets</li> </ul>	
Kitchen	<ul style="list-style-type: none"> <li>Wall mounted Boiler or sink boiler with safety button</li> </ul>	
Meeting table	<ul style="list-style-type: none"> <li>Larger</li> <li>Needs feet</li> </ul>	
Access/safety	<ul style="list-style-type: none"> <li>Include second exit into safe zone</li> </ul>	

## appendix a.9: additional design recommendations

### EXTERNAL

Item/area	Suggested changes	Requiring amendment at MNCCC
Yarn circle	<ul style="list-style-type: none"> <li>Shade sail</li> <li>Lower height of seats</li> <li>Install whiteboard on adjacent wall</li> <li>Respecify more comfortable seat material</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes (can dig in)</li> </ul>
Kitchen	<ul style="list-style-type: none"> <li>Install bench mounted water boiler like a Zip boiler, or install a tap guard to increase the number of distributed cups but inhibit a bucket to be filled</li> <li>Install drinking fountains</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> </ul>
Walking track	<ul style="list-style-type: none"> <li>Address blind spots in CCTV (especially garden areas)</li> <li>Redesign timber cladding on bottom of modules to reduce areas to hide contraband (flat panels would be more suitable)</li> </ul>	
Outdoor seating area	<ul style="list-style-type: none"> <li>Remove dead tree and surrounding bench</li> <li>Move picnic tables from outside library up onto deck, outside kitchen</li> <li>Install shade sail in front of kitchen</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>
Veggie garden	<ul style="list-style-type: none"> <li>After removing tables convert the area outside the library into a veggie garden</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> </ul>
Outdoor storage unit	<ul style="list-style-type: none"> <li>Install padlock and utilise for garden equipment</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> </ul>
Covered area between classrooms	<ul style="list-style-type: none"> <li>Install benches at the end of corridor to provide additional wet weather seating</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> </ul>
Phone	<ul style="list-style-type: none"> <li>If learners are to stay in the ILC during lunch a phone is needed</li> </ul>	

### LEARNER BATHROOM

Item/area	Suggested changes	Requiring amendment at MNCCC
Sight lines	<ul style="list-style-type: none"> <li>Create visual barriers or reposition urinals so they cannot be seen from outside the building</li> </ul>	
Smoke alarm	<ul style="list-style-type: none"> <li>Install guard around smoke alarm so it cannot be removed</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> </ul>
Towel rail	<ul style="list-style-type: none"> <li>Reconsider towel rails so they cannot be removed</li> </ul>	
Storage cupboard	<ul style="list-style-type: none"> <li>Provide storage cupboard for toilet paper and cleaning supplies</li> </ul>	



# appendix a.9: additional design recommendations

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## Amendments to drawings

Amendments made to furniture drawings during production. Some changes will need to be incorporated into new shop drawings.

### Filing cabinet:

- Draw width increased to accommodate 13mm runner clearance, not 15mm.
- Return on folder rails increased in length

### Teacher's desk storage box:

- Teacher draw width adjusted to accommodate 13mm runners, length also adjusted.

### Above desk shelves:

- Additional vertical divider added

### Outdoor storage unit:

- Shelves welded not bolted – holes removed from cabinet and shelves

### Front bench:

- Merbau set to 45mm
- Bracket dims adjusted
- Leg added to back of bracket
- The table now mounts only to the rear wall and not to the side walls as well.
- Holes therefore removed from Merbau legs
- Radius added to edges of top panel

Tables: notes included to add welded plates with M6 holes (to accommodate feet and castor insets) to the feet of Common table, Learner desk, Library staff desk, Learner Library computer table

### Soft seat:

- Ply side panels removed

### Library round table:

- Leg join changed to two intersecting 18mm panels

## Working Wall:

- Two working walls needed to be mirror version. The cabinets were able to be rearranged however the new configuration lost the side bookshelf in the cleaning module and a few of the faces were unfinished (meant to be concealed between modules) they also had exposed screw holes. These were covered with caps.
- Two new opposite hand teacher's desks were manufactured



## team

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