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Literacy in Corrections Inmate Employment

A thesis presented in fulfillment of the requirements for the degree of
Master of Management
in
Communication Management
at Massey University, Wellington, New Zealand.

Rosalie Artemiev
2008

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PREFACE

'So you write out their answers if they can't?' I ask. It is mid 2006 and I am interviewing a Corrections Inmate Employment Instructor for a newsletter story for Corrections. Six prisoners have just achieved National Certificate qualifications and he is telling me about teaching and learning in his industry. It is not unusual for prisoners to be able to do the job but not have the reading and writing to complete the qualifications he tells me. If they are keen and work hard he will write their answers down for them so they can be assessed. I admire his dedication. How many other teachers would do that I wonder? How many others would need to?

From the outset I was determined my research would be useful. Like many Māori I believe that "research simply for the sake of knowing is pointless" (Stokes 1985, 3); there needs to be a purpose to the work. Working as a Communications Advisor for the Department of Corrections I was involved with communicating the organisation's issues, successes, work, and processes to stakeholders. Working with Corrections Inmate Employment (CIE) staff I was constantly aware of their commitment to their jobs and how hard they worked in an environment of restrictions to provide training and employment experience for prisoners. Anecdotally, it seemed one such restriction was the low literacy levels of prisoners. When, in early 2006, I was offered a Masters scholarship my focus became prisoner literacy.

Literacy had been a topical issue in New Zealand since the Organisation for Economic Cooperation and Development (OECD) released its *International Adult Literacy Survey* (IALS) in 1997. IALS found 45 percent of New Zealanders had literacy levels below the minimum required to cope easily with everyday life (Johnston 2004; OECD 1997).

In 2001, the New Zealand Government's *Adult Literacy Strategy* tied the future well-being of the country to improved literacy. High-levels of literacy and numeracy and strong communication skills were required to transform and modernise the New Zealand economy, establish New Zealand as a knowledge society, and allow New Zealanders to fully participate in this society (Ministry of Education 2001).

Funding for my research arose from this priority. In 2004, the Government's Foundation for Research, Science, and Technology (FRST) funded Massey University and the Wanganui District Library to investigate adult literacy and employment in the Wanganui region under its Social Research output class. This class "supports public

good research, science and technology that improve societal well being" and funds projects that focus on the changing nature of work; developing human capability and skill; disparities between groups; positive social outcomes; social well-being; social connectedness; and social and cultural identities (FRST 2004). My project was linked to Massey University's larger *Literacy and Employment Project*.

Specifically, my research aims to provide an understanding of literacy in CIE. Early readings (see chapter 3) showed literacy as a complex phenomenon with researchers defining the concept, its purpose and value, achievement and measurement methods, and its relation to other concepts like employment or prisoner education in many different, and often conflicting ways. I chose to investigate literacy in practice in a prison-based employment training programme. To do this I profiled two Wellington-based CIE Industries: the Central Kitchen at Rimutaka Prison and the Print Shop at Wellington Prison. The result is a descriptive case study, which I hope provides insight into literacy in these industries.

It should be noted that social phenomena are complex, changeable, and often interlinked. Although I have tried to outline the main issues, inevitably, there will be perspectives that either remain uncovered or remain in the background. Thus, this research does not provide a definitive account of what literacy means, its values, quantification, function, purpose, or operation in CIE; rather, it is a description or snapshot of life in two prison-based employment training industries in New Zealand, focusing on the concept of literacy. At least, I hope the research provides the reader with practical knowledge about literacy in each CIE programme. At most, I hope it provides practical knowledge for informed change; change to allow more effective participation in existing employment training programmes.

ACKNOWLEDGEMENTS

Over the last two years, I have learned a lot; both about literacy and CIE, and about stepping into uncertainty. There are many challenges in completing a thesis, besides the academic. I wish to thank the all people who have assisted me, including my supervisor, family, friends, and colleagues; your support has been invaluable. I especially want to thank those at Rimutaka and Wellington Prisons who have both facilitated this research and have been part of the research itself – I hope the findings are as useful for you as the process has been for me.

ABBREVIATIONS

ALLS	*Adult Literacy and Life Skills Survey*
CIE	Corrections Inmate Employment
ESOL	English for speakers of other languages
FRST	Foundation for Research Science and Technology
IALS	*International Adult Literacy Survey*
ITO	Industry Training Organisation
NCES	National Certificate in Employment Skills
NZQA	New Zealand Qualifications Authority
PPM	*Public Prison Manual*

ABSTRACT

This thesis investigates literacy in prison-based employment training provided by Corrections Inmate Employment (CIE), a Government Training Establishment, in New Zealand. The descriptive case study aims to provide an understanding of literacy in CIE. It does this by combining existing research with information gained from participant observation and staff and prisoner interviews at the Central Kitchen and the Print Shop at men's prisons in Wellington. The thesis suggests that engagement with literacy in these CIE workplaces depends on whether it is safe or suitable to participate in workplace literacy activities; whether there is an opportunity to participate (including access to specialised support services like literacy programmes); and whether prisoners are interested in or see benefits from participating. For CIE to be more effective – both in providing a base for meaningful employment and lifelong learning – employment training needs to be offered in areas in which prisoners are interested, in tandem with embedded support services like literacy and numeracy training programmes.

CHAPTER 1
Research in Context

It is mid afternoon and not near dark but in the Central Kitchen at Rimutaka Prison dinner is being served up by prisoners. Trays moving along a short conveyer belt receive a pie, veges, fruit, and bread. They are covered with a heavy plastic lid and stacked on trolleys, before being delivered to units. It could be any industrial kitchen feeding people. Across town at Wellington Prison, prisoners from the Print Shop are back in their units waiting for their dinner. It is pie night. Today they printed training manuals for a course Head Office is running. As required, pages have been printed, collated, and organised in vinyl folders that were made a few days earlier. They are boxed, addressed, labelled, and sit waiting for the courier. It could be any small-scale print shop getting out an order.

These are not any industries though, focusing solely on delivering products or providing services to make a profit; they are Corrections Inmate Employment (CIE) industries. From a Department of Corrections' perspective these prisoners are receiving on-the-job training and experience, qualifications, and a work ethic. Education and training are intervention tools aimed at developing prisoners' self-sufficiency and increasing their chances of finding post-release employment (Department of Corrections 2006b; Von Dadelszen 2006b). From a Ministry of Education's perspective, prisoners are involved in training and achieving qualifications in a non-formal setting; CIE is a Government Training Establishment promoting educational success through lifelong learning so New Zealanders can contribute fully to the economy and to society (Ministry of Education 2006a, 2006b). To the Department of Labour, prisoners are improving their capacity as workers to potentially fill regional and national skill shortages and contribute to improved labour market capability (Department of Labour 1999, 2001).

In their eyes, the men working as cooks, vege hands, sandwich hands, trolley pullers, printers, plastic fabricators, bindery workers, store men or dispatch workers are doing their part to get the job done. Some may be there for the hourly sixty cents they earn or the extra food rations they receive as workers; some to show their commitment to pro-social employment, preparing for their next Parole Board hearing; some to make the most of the opportunity to better themselves, learn new things, gain qualifications and experience. Most do the best job they can within the prison environment; most work incredibly hard and take pride in their work. All are filling up time to make their

lag go faster. A few are looking for something to steal.

These are small-scale catering and printing businesses, behind-the-wire in Wellington and the backdrop for my research investigating literacy in prison-based employment training programmes. This chapter introduces this research. First, it outlines the research's objectives and methodological premises. It then summarises the methods used to gather data and order and analyse findings. The chapter concludes by providing an overview of the way these findings are presented in the thesis.

Research Objectives

This research aims to provide an understanding of literacy in CIE. This objective is purposefully broad as it was apparent from the outset that literacy could be seen from a number of perspectives. Like its objective, the project is framed by my norms, values, understandings, culture, and choices as a researcher (Berreman 1968; McGee and Warms 2000; Spradley 1979). In hindsight, this research process can be separated into two stages. The first addresses the question of 'How to investigate literacy in CIE?' The second looks at 'How best to order and present these findings?'

Investigating Literacy in Corrections Inmate Employment: Methodology and Methods

The first framework I used to investigate literacy in CIE is an ontology and methodology derived from anthropology. As will be discussed in chapter 3, literacy is both a social and a personal concept (Meek 1991), which can be viewed from a number of perspectives (Baquedano-Lopez 2004). Thus, a discipline like anthropology that broadly describes what it means to be human, the social world, and social phenomena (Schultz and Lavenda 2005) is particularly useful for investigating the complex and interrelated nature of literacy and how it operates in the working lives of prisoners in CIE.

As in any approach, anthropology and its limits are framed by its history (McGee and Warms 2000). Marcus and Fischer (1986) argue that anthropology is a fragmented and theoretically eclectic discipline, often framed in terms of a challenge between positivist and interpretive research paradigms. Differences between these paradigms stem from debates about understandings of the nature of knowledge and ethical research. Traditionally, anthropology was concerned with understanding 'the other' or the behaviours, beliefs, and life of other cultures (McGee and Warms 2000). More recently, anthropologists have focused on themselves, both by looking at localised social phenomena and by theorising on the relationships between researchers and

participants (Marcus and Fischer 1986). Underpinning the discipline is the notion of difference that allows insight into social phenomena (McGee and Warms 2000), but also raises ethical questions about the nature of the knowledge generated, the way it is generated, and who should initiate and control the process (Rudge 1993).

A framework for anthropological investigation needs to address the problematic self/other relationship inherent in the discipline. As Fox (1991) and Trouillot (1991) argue, this needs to go beyond simply discussing or critiquing self/other distinctions or adopting reflexive, polyphonic, or dialectic devices. Rather, as Trouillot (1991) proposes, the reflexive lens needs to be turned on the discipline's underlying premises. Anthropology needs to address the thematic field – the larger world – which makes 'the other' possible, instead of trying to reconcile 'the self' and 'the other' by examining internal tropes.

This research addresses this challenge by adopting an alternate conception of the self and of knowledge (see appendix 1). Discarding the mindset that self/other divisions are inevitable, it develops a personal ontology based on mutuality and action from the work of philosopher John MacMurray (1929, 1950, 1961, 1962, 1968).[1] In short, this personal framework is developed from the premise that although cultural, social, economic, or environmental differences exist, participants and researchers are people first and foremost. In this type of enquiry, understanding is gained through personal experience not simply through reflection or abstraction of the experience. Research is about gaining understanding of a topic in a way that acknowledges humanity. This necessarily involves equality and freedom and cannot be achieved if any aspect of the research is not mutually good for the researcher, the participants, or the community. From this perspective, the fact that a project is personal is more important than the identity of its initiator.

Expanding on MacMurray (1929, 1950, 1961, 1962, 1968), many forms of personal enquiry are possible. The key elements are that the research is conducted from the standpoint of action and guided by mutuality (see appendix 1). It should be noted that this framework is an ideal. Mutuality cannot be compelled. If any party distances themselves from the other, then generated knowledge becomes less complete. This does not mean that it is worthless or that personal enquiry should not be attempted: any move to understand the social world more personally will result in social knowledge becoming less abstract. Instead, researchers and readers alike need to be honest about the nature of the knowledge generated and the claims that can be made from this knowledge.

In addition, techniques can be used to try to make research more personal. Rudge

(1993), for example, advocates collaborative research where the need for and process of research is articulated by participants. Bishop (2005) and Smith (2005) argue for a kaupapa Māori approach to research things Māori. Others use narrative (Chase 2005), performance (Finley 2005), or writing (Richardson and Adams St.Pierre 2005) to explore relationships between participants and researchers and to generate understanding of social phenomena.

In this research, personal enquiry is encouraged by investigating literacy in use in CIE; by acknowledging that the social world can be explored from multiple perspectives; by ensuring participants are related to as other people, not as objects or means to an end; and by ensuring research decisions are guided as much as possible by MacMurray's principles of friendship, equality, and freedom (1929, 1950, 1961, 1962, 1968). Providing an understanding of literacy in CIE within this methodological framework means selecting research methods both to establish the context in which CIE operates and to investigate literacy in use in CIE (including what it means; how it is used; its role in the workplace, training, and learning; and motivators or barriers to literacy).

The following research methods were chosen to do this: (1) examining the context in which CIE operates; (2) investigating literacy in two CIE industries in the Wellington region; and (3) describing the literacy demands, tasks, and skills in each industry (see figure 1). In practice, this meant studying literature, documents, and research to gain an understanding of the situations, institutions, organisations, policies, strategies, and stakeholders that impact on and influence literacy and CIE. It meant referring to existing research to gain an understanding of the literacy levels of prisoners and the public. It meant observing normal workdays in the Central Kitchen and Print Shop. It meant watching and discussing tasks, reading, writing, arithmetic, and communication activities in each CIE industry. It meant interviewing CIE Instructors and Business Managers at each site about literacy activities, employment, and training in their workplaces. It meant holding focus groups with prisoners working in the Central Kitchen and the Print Shop about literacy, their jobs, and the way literacy is used in their work. It meant describing literacy and creating literacy profiles of each workplace using participant observation, literacy, numeracy, and language description scales, and interview techniques. The way the principles of action and mutuality were considered in developing the above research methods is discussed further in appendix 2, while the methods themselves are described in more detail in appendix 3.

In this way I began gathering background information and finding out from the people on the ground what literacy meant to them, how it was used or not used, and

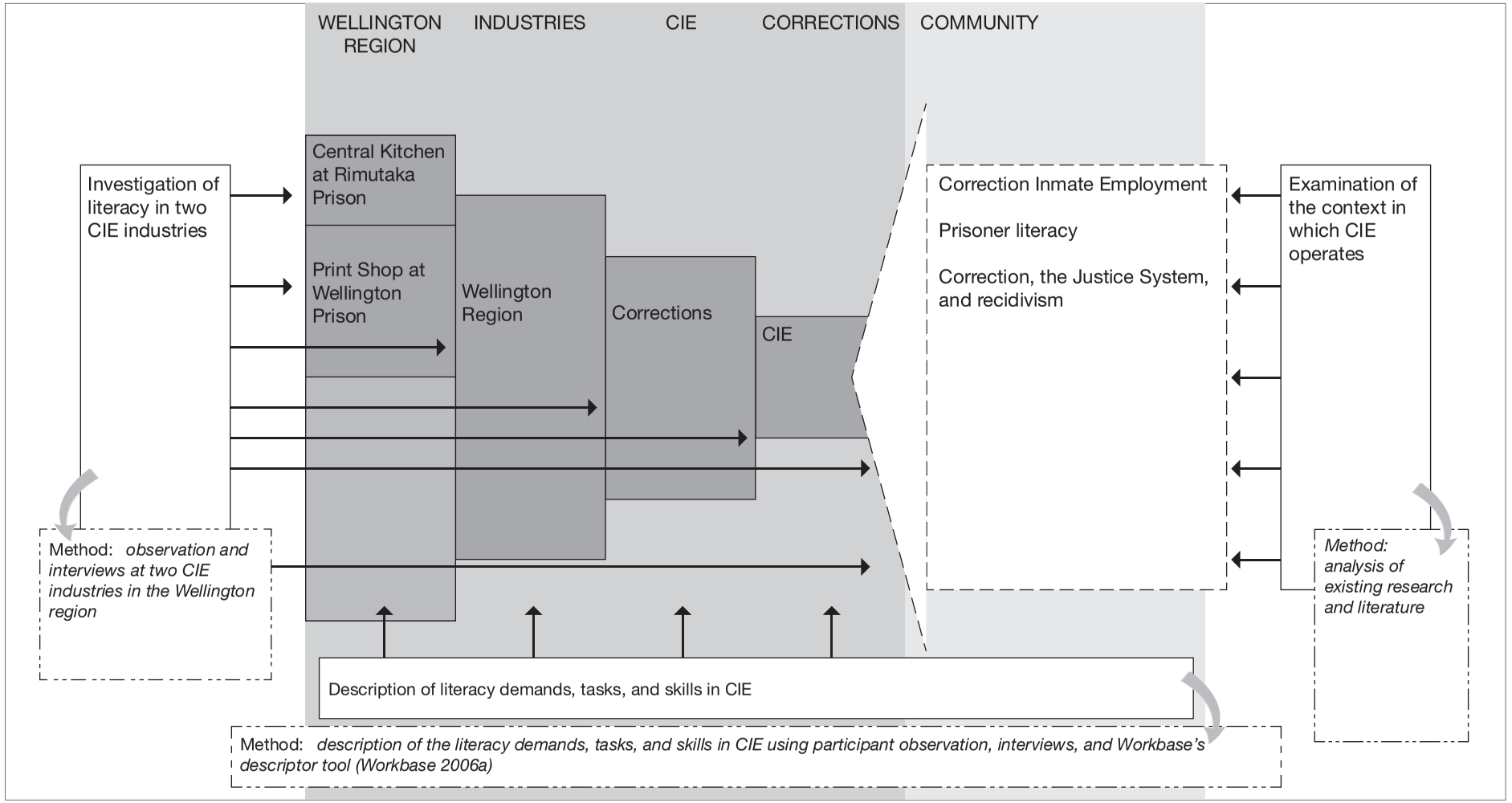

Figure 1. Diagram showing the relationship between the Central Kitchen, Print Shop, CIE, the Department of Corrections, and the community and the research methods used to investigate literacy in each environment.

the implications of this in their lives. These were equally important tasks as failure to investigate the social, economic, and political contexts of people, communities, and institutions ignores some of the most significant dimensions of social life (Barrett 1996). Similarly, failure to adequately present phenomena in their own worlds prevents understanding of their uniqueness and complexity (Stake 2005).

Ordering and Presenting Findings: Description, Analysis, and Interpretation

The second framework I used in this research draws on conceptual systems evident in community of practice literature. Analytical choices made before entering the field – like not fixing methods of analysis – meant I had large amounts of information, in a number of formats, from a variety of perspectives.[2] Furthermore, the complex nature of literacy itself (Fernandez 2001) made it even more difficult to conceptualise as participants talk about it in a number of conflicting ways, often in the same sentence.

On reflection, it became apparent that this is what literacy is all about – so much so that Vaccarino (2007) goes as far as to question whether literacy can be defined at all. Literacy is complex, jumbled, hugely varied, and hard to explain. My research suggests this is the norm and not the failings of a bunch of confused participants who do not really understand things properly. While the norm of literacy is as complex as life, delineation of its aspects can provide some understanding of the concept (see chapter 3). Likewise, to provide an understanding of literacy in CIE, the variety of information and perspectives collected during fieldwork needed to be almost artificially separated, ordered, and re-presented in order to record them in an accessible way.

Conceiving the workplace as a community of practice, where learning occurs on a number of levels (Rainbird et al. 2004), is helpful in ordering this information. In their work Rainbird et al. (2004) investigate: learning with relation to the societal, institutional, and organisational structures influencing work; the relationships between workgroups; and external influences on work places. While these divisions are artificial, conceptualising literacy in CIE in this way provides a framework for presenting complex and interconnected information.

In transforming data from information to understanding, I also found Wolcott's broad distinction (1994) between description, analysis, and interpretation useful. My research is about understanding: this entails a level of description so readers understand what is going on; analysis so they can understand how things work; and interpretation so they can understand how, why, and what things mean. Each component is selected and presented with regard to research goals (Wolcott 1994, 2001).

The way this research is presented – how it was written, its style, and its structure – were specifically chosen to provide the best and clearest understanding of literacy in CIE that I could. This is not a new approach. Meloy (2002) notes an emerging trend in qualitative research to present dissertations in a way that best suits their purpose. Likewise, Wolcott (2001) argues that dissertations should only draw on the resources they need to provide the understanding required; sections should not be included simply because tradition dictates. In this way, Chicago style has been selected as it provides the most flexible stylistic format guidance system.* In some cases, a book rather than thesis variation has been applied as this style leads to a clearer understanding of literacy in CIE.

In terms of structure, the preface and introduction (chapter 1) provide an overview of the research processes used in this research. Detailed explanations of methodology and methods are provided in the appendices. Appendix 1 outlines the alternate conception of the self and of knowledge that underpins this study. The conclusions of this discussion form the methodological premises employed in this research and guide research decisions. Appendix 2 discusses how the methods employed in this research were selected to align with these methodological premises, while appendix 3 specifies the research methods employed. Appendix 4 contains the interview schedules and focus group questions used during interviews, appendix 5 outlines the literacy description scale used to describe workplace literacy, and appendix 6 contains the information sheets and consent forms used during fieldwork.

Similarly, information not immediately pertinent to the topic has been placed in notes. Footnotes are used for brief notes, while endnotes are used where notes are more substantive. To maintain flow, tables are inserted as soon as possible after their first text reference, while most figures† are collected in two galleries following the sections that contain most references to them. In constructing the text itself, a more positivist third-person, fact-based style is employed in some places; at others times a more subjective narrative style is used.[3] The goal is to foreground the parts, which address core research objectives and background the more procedural and explanatory sections.

It should be noted that the literacy outlined in this thesis is a reflection of literacy in the field and has been artificially segmented or delineated to allow it to be represented in text. According to the personal schema (MacMurrary 1929, 1950, 1961, 1962, 1968), it is a step

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* Kate Turbian's A Manual for Writers of Term Papers, Theses and Dissertations (1996) has been consulted in the first instance. Where this is unclear, the more detailed Chicago Manual of Style (University of Chicago Press 2003) has been used.

† Chicago style defines figures as drawing, paintings, photographs, charts, graphs, and maps etc. that are used to illustrate published works (Turabian 1996; University of Chicago Press 2003).

removed from experience and thus provides generalised knowledge, insight, or information – not detailed knowledge – of concepts. In addition, the type of literacy discussed varies within and across sections with alternative perspectives purposefully juxtaposed against each other. No one section, chapter, or part provides a complete or definitive or 'right' understanding of literacy, rather they add to provide a multidimensional picture of literacy in CIE.

In the reading of this thesis, the term 'literacy' is used loosely to refer to both literacy and numeracy. In addition, it is used to refer to the functional understandings of literacy and the more situated multiliteracies as both these meanings are used interchangeably by participants (see chapter 3).

Thesis Structure: An Overview of Findings

As discussed above, this thesis is organised to best illustrate the various meanings of literacy and the way it operates in my case studies. Findings are separated into two parts. Each part includes both quantitative and qualitative examples, descriptions, analysis, and interpretation of the concept drawn from the literature, the field, and from other primary and secondary research sources. Chapters and sections are designed to provide an overview of the research, describe the context in which CIE operates, and provide a snapshot of literacy in CIE. This chapter begins by summarising the methodology employed in this research.

Part I sets out the context in which the Central Kitchen, Print Shop, CIE, and the Department of Corrections operate and the national educational and correctional policies impacting on literacy in CIE. Information is mainly sourced from existing research and literature, although chapters 2 and 3 include some fieldwork data.

Five chapters make up part I. Chapter 2 provides an overview of CIE's parameters, objectives, and activities. It introduces the Central Kitchen and the Print Shop and summarises the main features, activities, and guidelines governing these industries. Chapter 3 discusses the various ways literacy is understood in academic literature and outlines the framework used to explore literacy in CIE. It then revises this framework in light of fieldwork observations that show functional terms like reading, writing, and arithmetic act as a type of shorthand for the variety of ways individuals use literacy to understand and creating meaning in the workplace. Chapter 4 looks at how New Zealand's national education philosophies and policies – including those on literacy and labour – shape the programmes provided by Government Training Establishments like CIE. Chapter 5 outlines results from existing national and international research that attempt to quantify prisoner literacy levels and establish a literacy-profile of prisoners.

It then discusses the literacy levels of New Zealand prisoners in light of international findings on prisoner literacy. Chapter 6 discusses links between literacy and recidivism in correctional literature. Although there is no causal relationship between the two variables, literacy appears to be related to education and employment and both of these help to reduce re-offending.

Part II focuses on life in CIE and on literacy in CIE by describing workplace processes, structures, interactions, and communication in the Central Kitchen and Print Shop. Referring to ideas of "meaning in use" or "literacy in use" (Belfiore et al. 2004) part II explores the connections between the literacy, local situations, and meaning. Information is sourced from fieldwork, interviews with staff and prisoners, and the Department of Corrections, and considered in relation to findings of existing research.

Three chapters make up part II. Chapter 7 contextualises the research by describing a normal working day in the Central Kitchen and Print Shop. Chapter 8 examines the similar ways that the prison environment shapes workplace processes in the Central Kitchen and Print Shop. It then discusses the impact of this on literacy in CIE. Chapter 9 looks at difference between literacy in the Central Kitchen and the Print Shop that arise from the varying subject matter, work processes, systems, and technology in these environments. It does this by describing the literacy required for participation in work and training at each site.

Chapter 10 concludes the thesis by summarising the understandings of literacy in CIE that have been uncovered in the course of the research. It concludes that literacy needs to be understood in the context of the whole person and suggests that to be effective, training needs to be offered in areas in which prisoners are interested, in tandem with support services like literacy and numeracy assistance.

PART I
Understanding Corrections Inmate Employment, Understanding Literacy

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Part I sets out the context in which the Central Kitchen, Print Shop, CIE, and the Department of Corrections operate and the national educational and correctional policies impacting on literacy in CIE.

CHAPTER 2
Corrections Inmate Employment

One of the outcomes for Corrections, and therefore a theme area, is to contribute towards an overall reduction in the level of re-offending. By using a range of strategies and initiatives the Department will work to address the risks of re-offending. This will be achieved through the provision of rehabilitative and reintegrative interventions and activities designed to assist offenders to address their offending behaviour and return successfully to the community.

Department of Corrections, *Strategic Business Plan 2003-2008*

The Department of Corrections is tasked with managing offenders in prisons and in the community. It contributes to the Government's overarching outcome for the Justice sector of a safe and just society by protecting the public and reducing re-offending (Department of Corrections n.d., 2002, 2007d). The main aim of CIE is to provide prisoners with employment skills, training, and formal qualifications within the parameters set by the Department of Corrections and the Government. Education and training are seen as recidivism intervention tools as they increase prisoners' chances of finding post-release employment.

CIE works with relevant Industry Training Organisations (ITOs) to offer industry-approved qualifications. It runs around 140 small to medium businesses in the farming, forestry, timber, horticulture, catering, laundry, manufacturing, construction, printing, tailoring, and engineering sectors (Department of Corrections 2006b).

The majority of CIE training is provided by operating business-like industries like kitchens, print shops, farms, carpentry workshops, textile workshops, uniform stores, or nurseries. These industries are run similarly to workplaces on the outside and aim to provide prisoners with work skills and work habits in realistic work environments. This approach is based on correctional research (see chapter 6) that shows prisoners who find sustainable work after release are less likely to re-offend (Department of Corrections 2006b).

In addition, CIE operates supervised prisoner work gangs to provide prisoners with practical work experience; it administers the Department of Corrections' Release to Work programme, which allows prisoners nearing the end of their sentence to work

during the day in positions in the community; and it offers classroom and workshop vocational training sessions at some prisons (Department of Corrections 2006b).

Training is often in areas where there are regional or national skill shortages. In November 2007, approximately 45 percent of the prison population was employed at any one time (Department of Corrections 2007b). Table 1 shows the unit standards and employment hours provided by each CIE sector in the 2006/07 financial year. In the ten months from 1 July 2007 to 30 April 2008 the Central Kitchen employed 54 prisoners, the Print Shop 32 prisoners, and CIE 1,952 prisoners (Department of Corrections, unpublished data). Table 2 shows the number of unit standards and employment hours provided in the Central Kitchen and the Print Shop for the same period.

Table 1. New Zealand Qualifications Authority Unit Standards and Employment Hours provided by CIE in 2006/07 by Sector

Employment Activity	Unit Standards	Employment Hours
Land-Based Activities (e.g. farming, forestry, horticulture)	1,456	791,046
Manufacturing, Construction, Labour-only services	1,695	807,954
Internal Self-Sufficiency (e.g. kitchens, laundry, cleaning, prison asset maintenance)	3,309	1,435,154
Release to Work	...	157,613
Vocational Training	...	30,913
Community Services (e.g. work parties)	...	79,766
Total	6,460	3,302,446

Source: Data from Department of Corrections (2007a).

Note: These figures relate to unit standards and employment hours provided by CIE only. Vocational Training and Internal Services unit standards and employment hours provided by the Public Prison Service are not recorded here. Unit standards are not offered in Release to Work or Community Services. No unit standards in Vocational

Training were offered in 06/07.

Table 2. New Zealand Qualifications Authority Unit Standards and Employment Hours provided by the Central Kitchen and Print Shop between July 2007 and April 2008

Industry	Unit Standards	Employment Hours
Central Kitchen	51	126,497
Print Shop	14	43,343
CIE	9,499	3,162,033

Source: Unpublished data from the Department of Corrections.

Introducing Cases: the Central Kitchen and the Print Shop

The Central Kitchen and the Print Shop are the two largest CIE industries in the Wellington region. The Central Kitchen employs around thirty prisoners at any one time while the Print Shop employs around fifteen. Table 3 summarises the main features, activities, and policies in the Central Kitchen and the Print Shop when I visited them between August and September 2007.

Table 3. Summary of the Features, Activities, and Policies in the Central Kitchen and Print Shop between August and September 2007.

	Central Kitchen	Print Shop
Location	Rimutaka Prison	Wellington Prison
Hours	6am-6pm, every day, shift work	8am-2pm, weekdays
Business	Industrial kitchen feeding 950 prisoners each day.	Small-scale print shop providing printing services for the Department of Corrections and specialist/niche publications for external clients (digital and offset printing and plastic fabrication).
Main Focus	Feeding prisoners at Rimutaka Prison and providing prisoners with work experience and training.	Providing prisoners with work experience and training.
Policy	*Public Prison Manual* (stipulations for food). *Prisoner Employment Strategy.*	*Prisoner Employment Strategy.*
Training	NZQA unit standards in catering.	NZQA unit standards in printing and print finishing.
Staff	5 Instructors, 1 Business Manager.	3 Instructors, 1 Business Manager.
Workers	Around 30 prisoners employed as drivers, prep cooks, trolley pullers, cooks, dishwashers, vege hands, sandwich hands, cleaners, store men, and in rations (PCU).	Around 16 prisoners employed as offset printers, digital printers, plate makers, bindery operators, cleaners, plastic fabricators, and store men.
Networks	Prison Service, CIE, Hospitality Training Institute (ITO), Health Board and Certifiers, Occupational Health and Safety, Suppliers, Ombudsmen and Inspectors.	Print Federation of New Zealand (ITO), Clients, Suppliers, CIE, Prison Service, Occupational Health and Safety.

Source: Fieldwork observations and unpublished data from the Department of Corrections.

CHAPTER 3
Investigating Literacy

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*"So, how do you know if you are literate?" I asked prisoners in the Print Shop. Throughout my field work this question had caused the most surprise, then silence as participants tried to verbalise something that first appeared so obvious. "How do you know you are literate?" The question is repeated back to me. "You just do," says David. "Because someone in the jail tells you!" says Luke. Adding to each other they unpack what it means to be literate. "Surely, there is an ease to what you are doing, you do it feeling confident and competent. If you have no worries in the task that's laid in front of you, you have a pretty good idea that you have work literacy on that... at least that particular task," says Daniel. James disagrees, "Not necessarily..." but doesn't carry on his explanation. On my right Don and Carl quietly discuss the question, "Do you feel heard and understood?" Don suggests. "Do you get what you want?" Carl offers. "Yes that's it," agrees Don. Then Luke continues, "Like when you first come to jail they give you like 100 questions... and if you don't tick the right ones on their questionnaire thing then they put you into that category... They decide for you what you are. Now I don't believe in that."**

Extracts from a prisoner focus group, Print Shop

Academic literature shows literacy is an interdisciplinary concept with theoretical and methodological perspectives in fields like psychology, linguistics, anthropology, human development, and education (Baquedano-Lopez 2004) and little agreement about what literacy is, its role, or how it should be taught (Fernandez 2001). Defining literacy, therefore, became one of the first challenges of my research. This was additionally problematic because I was reluctant to firmly define literacy in case my research reflected 'what I knew' and not 'what I saw' and the chosen definition was at odds with reality in the field (Barrett 1996). At the same time, I acknowledged my pre-existing knowledge – my language, norms, beliefs, values, understandings, and culture – already shaped how I acted, reacted, interpreted, and created meaning (Berreman 1968; Spradley 1979).

To reconcile this tension, I needed a definition that acknowledged these perspectives but did not pre-restrict the research to one school of thought. This chapter

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* Pseudonyms are used to protect participants' identities in all examples sourced from the Central Kitchen and Print Shop.

first outlines the framework or model of literacy I used, as Agar (1996) says, to consciously enter the field with an open mind and not an empty head. The chapter then explores meanings of literacy I found in the Central Kitchen and the Print Shop before revising the framework in light of these understandings.

Literacy in the Literature: Paradigms and Perspectives

The framework begins with familiarity with the variety of understandings of literacy. In his review, Roberts (1995) identifies four broad and often overlapping themes in the literature on literacy. He terms them the oral/literate divide; literacy and economic development; literacy, reproduction and resistance; and postmodernism.

Work in the oral/literate divide category (Roberts 1995) discusses the relationship between written and oral forms of communication. It looks (cognitively, socially, culturally etc.) at what it means to be literate and debates literacy's social, cultural, cognitive, and technological function and impact. Work relating to literacy and economic development looks at the relationship of literacy to a country's economic potential, economic stagnation and depressed trade, low life expectancy, poor health, substance abuse, homelessness, and high crime rates (Roberts 1995). This research debates the ability of literacy to improve socio-economic problems and achieve economic efficiency, scientific achievement, raise living standards, or increase participation in personal, working, and public lives (Roberts 1995; Falk and Millar 2001, 2002b).

Work in Roberts' reproduction and resistance category (1995) looks at how the status quo is promoted and challenged through literacy; while his postmodern category (1995) looks at the role of the reader in attributing meaning to text. Drawing on social and cultural theories and postmodern philosophy, postmodern literature on literacy explores how meaning is coloured by context and the reader's world view. This has led to discussion about the context-dependent nature of literacy (multiliteracies), the importance of alternative (non-economic focused) literacies, and empowerment of people by providing them with literacy skills that allow them to critically analyse texts.

Within these four paradigms, literacy is often seen as a basic skill or functional necessity for life, a social practice, a means of promoting growth and heritage, or in terms of cultural capital (Falk and Millar 2001, 2002b). Basic skills or functional approaches view literacy as the acquisition of transferable perceptual or cognitive skills like decoding for reading and encoding for writing that are required to perform tasks in everyday life (Falk and Millar 2001, 2002b; Street 2006; Sutton 1996). On a functional level, the literacy skills required for work are the minimum skills required to do the job

(Culligan 2005). Workplace literacy is the ability to decode or encode workplace texts like instructions, labels, and check sheets (Hull 1999). Functional approaches to literacy learning often emphasise word recognition and phonics. Literacy skills are not context-dependent and are transferable across contexts. In education and training paradigms it is argued that increasing an individual's functional literacy has social and economic benefits as it can increase participation in personal, working, and public life. Numeracy is understood similarly, except in terms of arithmetic and computational skills (Falk and Millar 2001, 2002a, 2002b)

Social practice approaches (which include critical approaches, new literacy studies, integrated literacy, and multiliteracies) argue that literacy is embedded in everyday tasks and is reliant on social context (Falk and Millar 2001, 2002b). Some social practice researchers go as far as to argue that literacy – or other skills – cannot be transferred between contexts because they cannot be defined separately or autonomously from the context in which these are embedded (Falk and Millar 2001). The variability and variety of everyday contexts give rise to the idea of multiple literacies and the term "multiliteracies" adopted by the New London Group (1996) and Cope and Kalantzis (2000). From a social practice perspective, workplace literacy includes knowing industry and work practices; understanding workplace culture, norms, organisational systems, and practices; mastering the practical and technical elements of the job; and mastering the linguistic, cultural, and interpersonal skills required for effective workplace communication (Hull 1999). Similarly, social practice approaches to literacy learning emphasise providing learners with skills to actively create and challenge meanings across their working, public, and private lives (New London Group 1996). Perceptions of numeracy are similar to those of literacy (Falk and Millar 2002a).

Falk and Millar's growth and heritage and social capital approaches (2001, 2002b) seem to be approaches to literacy learning rather than definitions of literacy. Growth and heritage approaches view literacy as a pathway for personal growth and development and a valuable tool in providing access to the heritage of a culture (Sutton 1996). Literacy learning emphasises understanding meaning as a whole – the relationship between words, comprehension, phonics, and social context – rather than single word recognition. They are often referred to as whole language, needs-based, student-centred, language experience, psycholinguistic, growth, development, or process approaches to literacy learning (Falk and Millar 2001). Social capital approaches see literacy learning as central in the development of social capital resources (Falk and Millar 2002b). In social capital approaches, literacy learning focuses on what Freebody and Luke term

code breaking, meaning making, text using, and text analysing (Falk and Millar 2002b). Code breaking involves knowing the oral and written symbols of language and their relationship to each other. Meaning making involves applying code breaking skills and existing knowledge to texts in order to understand the experiences they convey. Text using acknowledges that the user can and will use texts in a variety of contexts. Text analysis involves an examination of texts to understand their purpose and the potential effects of how they are written.

Across the literature, Roberts (1995) found a large proportion of authors held a situated view of literacy. That is, literacy is conditioned by the environment it is learned and practiced in. This means there is no fixed or singular literacy, but different literacies depending upon the situation. He also notes considerable support for the idea that literacy, at least, has the potential to assist with logical, critical, rational, and philosophical thought development. This being said, as Fernandez (2001) argues, it is impossible to find a stable, authoritative definition of literacy. Rather than consensus, most definitions ignore alternatives and any merits they might have. The result is a varied, often conflicting, body of literature that defines literacy in different ways.

I believe this disparity does not arise so much from argument about what literacy is in itself. The argument is in the action – that is the value society should place on literacy; what its purpose should be; what can be achieved through literacy; how literacy should be taught, used, measured, or tested; its relation to other concepts; and who should make these decisions. Literacy is not just a theoretical concept but a practical tool. These elements have been blurred together in its definition. This has resulted in fragmentation of the literacy paradigm and debate about what legitimately constitutes literacy. Leaving arguments about value of literacy aside, it seems most definitions relate literacy to the creation and understanding of meaning in some way, and more specifically, that meaning is either contextual or universal.

A Model for the Field

As discussed above, the literature shows that literacy has both a contextual and universal nature and that both these elements are important in its understanding. In her work, Martens (1996) effectively distinguishes the concept of literacy from the act of realising literacy.[4] This distinction provides a framework that both allows the different approaches to literacy to co-exist and privileges none of them. Literacy as a concept is the creation of meaning using text.* The way it is realised can be viewed using a continuum (see figure 2). At one end, literacy† is highly personal, contextual,

and multiple; it is tied to context and only fully accessible or even recognisable to its creator. At the other end, literacy is abstracted, universal, and singular and can be fully understood, without explanation from its author, both outside and without reference to the context in which it was created. In this way literacy is simultaneously personal and collective, and like other social phenomena, it is both a global and a local phenomenon (Jacques 1989).

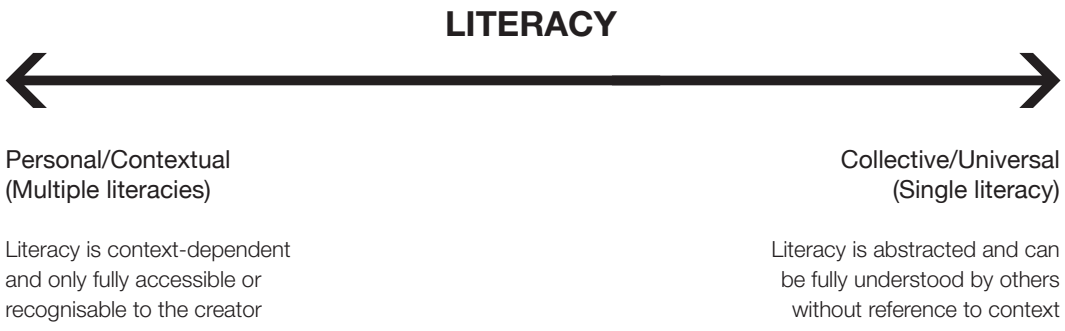

Figure 2. A literacy continuum. Conceptualising literacy along a continuum allows it to be a simultaneously personal and contextual and collective and universal phenomenon.

It must be noted that positions at each end of this continuum can probably only ever be conceptual. Literacy cannot be fully contextual as meaning would not be able to be shared or transferred (Street 2006). Likewise, it cannot be fully universal as this disregards social influences on meaning (New London Group 1996). Rather, as Meek (1991) proposes, reading is thinking about meaning, while writing is making this thinking visible as language, "Literacy has two beginnings: one, in the world, and the other in each person who learns to read and write" (1991, 48).

This view of literacy is not without problems, as some argue action or practice is part of what defines meaning. Street (1984) for example asserts that the meaning of literacy for students is linked to how it is taught, while Courtney and Graff observe that all definitions are influenced by their author's world view, purpose, and orientation (Quigley 1997). Separating the action from the concept however, provides a broad and open-minded framework for beginning to explore the action of literacy in CIE.

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* The term texts is used to acknowledge the idea that many context-dependent approaches to literacy see it as wider than reading and writing and number work.

†. More specifically, the meaning generated using texts as literacy is realised is highly personal, contextual, and multiple.

The Meaning of Literacy in CIE

Fieldwork in the Central Kitchen and the Print Shop immediately justified the methodological decision not to limit the study to a single paradigm. While data was more difficult to order, analyse, and present, not fixing a definition allowed exploration of the variety of – often conflicting – ways participants understood literacy. Analysing field notes and interview transcripts it became apparent that literacy in CIE is not neat and tidy but a complex, jumbled, and hugely varied concept that is hard to explain and difficult to isolate. There are, however, a number of similarities between understandings of literacy at each site. This section outlines some of the meanings of literacy in CIE that I noted during my fieldwork.*

When first asked about the meaning of literacy and numeracy participants immediately and confidently identified literacy and numeracy functionally – as the reading, writing and arithmetic (3Rs) required to 'get by' in everyday life. The meaning of workplace literacy and numeracy was identified similarly except in terms of working lives. While prisoners did not quantify this level, staff in both industries identified it as equivalent to the reading, writing, and calculating required for completing schooling to around Year 9.

A much broader multifaceted and context-dependent picture of literacy and numeracy emerged as participants explained how things operated and they provided examples of literacy, numeracy, language, work, and learning in CIE. One feature of this literacy is its non-fixed nature and a difficulty by participants in identifying its meaning absolutely. In the Print Shop, both prisoner, Luke and Instructor, Kevin came to similar conclusions about the multiple and intangible nature of literacy in the workplace. Luke noted that "there are lots of different grades of what you're asking ... you can't stick to one sort of grade" while Kevin said that "with a trade you've got to have certain different things to look at. To focus on different things. Literacy in a different way if you know what I mean … Problem-solving, something like that. Looking at and solving it in a different way." A little later he offered, "I can't define it to tell you the truth ... I couldn't give you an example one, two, three just like that. I just know it's there."

During fieldwork and in interviews, workplace literacy activities were described and explained and alternate contexts – like 'outside', other industries, other workplaces – were explored. Attempts to fix meaning or remove it from context led to recognition

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* Associations of literacy to concepts like authority, motivation, potential, and social capital are also made by participants. These are discussed in chapter 8, which looks at individual and collective identities in CIE.

of the incompleteness or inadequacy of the summary and recognition of literacy's multiple aspects. As catering Instructor Tom said at the end of our interview, "Speaking, I mean literacy and numeracy... when you asked me at the beginning... Oral, verbal communication is part of literacy as well isn't it because you've got to know what to say and how to say it and in what context and what words." Similarly, David, a prisoner in the Print Shop said, "There are so many different kinds of literacy... There is... practical literacy... the literacy around operating machinery, it is so much wider than being able to read and write English."

Linking literacy to context through the idea of "meaning in use" (Belfiore et al. 2004) allows understanding of the local meanings of literacy and numeracy in CIE (Belfiore et al. 2004; Cope and Kalantzis 2000; New London Group 1996; Roberts 1995). In the Print Shop, prisoners acknowledge the context-dependent, multifaceted nature of literacy and the variety of ways a person can be literate. For David, each job requires different literacies or skill sets, "If you are on a building site you need to know how to use a tape measure... You need to be able to use a computer and read and write manuals... if you are working in an office. If you are a gardener you need skills relating to that." Carl notes the importance of acknowledging alternate literacies in the workplace:

> You've got people who might not be able to explain themselves... on a piece of paper. And yet they could show you how to use a machine or put it back together again using all the correct terminology, the right tools, the right names for tools... [Others may be able to]... write out a pressie on how that might be done, but they wouldn't be able to write a letter to their mother. So they would be illiterate in that sense.

Carl's comments illustrate literacy in CIE is both linked to ideas of purpose or function and to illiteracy. On analysing field notes and transcripts it is apparent that it is difficult to discuss literacy without reference to the environments in which it is used. The purpose of use is a key element of literacy that is omitted from the literacy continuum (see figure 2). I first noticed this omission in the prisoner focus group interview in the Central Kitchen where Frank emphasised that literacy at work was more important for accessing information and for understanding than for influencing things.

This idea of 'reading to do' (and 'reading to know') is explored by Hull (2000) in her research on literacy at work. Hull (2000) argues that not all literacy practices are alike and workers use literacy activities like reading and writing for many different purposes. My fieldwork suggests that literacy's purpose can be broadly classified as literacy for information or understanding meaning and literacy for influencing or creating meaning.[5] In both cases, literacy is an enabler that, in one way or another, allows greater

participation in workplace activities. Printing Instructor, Kevin, illustrates this when he says that "[literacy is] like a building block for everything else. If you haven't got that you're disadvantaged I would say... If you haven't got it through no fault of your own you're still disadvantaged." A little later he comments on workplace communication and instructions, "If you are literate you can have more intelligent discussion, more detailed discussion. Whereas if you're not, you can only go so far before there is a barrier there."

At both sites literacy seems to be tied to the concept of knowledge and knowing. As Catering Instructor, Tom said before, part of literacy is knowing how to communicate appropriately in different contexts. In the Print Shop, Business Manager, Marcus links literacy to knowledge when he asks, "If they can't read and write, how do they even know which chemicals they're using? If they can't read and write, how do they know how to follow instructions on mixing products? Or which products not to mix? Or which products are poisonous? Or which products are health and safety problems? Or which cleaners they're using?.. If they can't read and write, how do they know they don't put their fingers in that, apart from a bad experience? How can they follow signage if they can't read and write?"

Although participants recognise the importance of alternative literacies in participating in work, it is still seen as integral to knowledge and being literate has positive connotations. Literacy, as Collins and Blot (2003) argue, carries a status and loosely refers to any corpus of systemic useful knowledge. Returning to Carl's comment, which links inability to illiteracy – from my observations, literacy is either positively or negatively associated with an ability to do something. In my interviews participants responded to the question of "How do you know if you are literate?" either by describing what people who are literate can do or by describing what someone who was not literate would be unable to do. Literacy, like the self or any other concept (see appendix 1), is also defined by what it is not.*

In CIE, literacy is measured against an ability to understand and create meaning in situations relevant and important to the individual. As Luke's critique of the prison literacy test at the start of this chapter illustrates, literacy tests are not recognised as accurate indicators of literacy ability if they are unrelated to situations important to the individual. As Don suggests, literacy in a broad sense is about whether "you get what you want."

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* This does not mean that low literacy is a deficit or should be blamed on individuals (see Sligo et al. 2005) but that the negative aspect of something is part of what defines it. The concept of positive and negative is part of the theoretical premises of this research and is discussed in appendix 1.

As can be seen in the above examples, the language used to describe literacy is often paradigmatically confused by academic standards, with participants using both functional terms *and* more situated multiliteracies terms. My fieldwork highlights the flexible ways participants describe the nature of literacy. Single/universal and multiple/contextual ways of describing literacy (see figure 2) are used interchangeably to refer to the same event. Reading, writing, and arithmetic seem to act as a type of shorthand for the variety of ways individuals use literacy for the purpose of understanding and creating meaning in the workplace. The details or longhand of literacy in the workplace is similar to the situated literacy discussed by Roberts (1995).

CHAPTER 4
Literacy, Work, and Education in New Zealand

I don't think it's absolutely essential to every job out there to be literate or numerate. But, in society as it is now, to be honest, money is important, and to earn the sort of money that you need just to get by, just to live, those sorts of jobs are going to need you to have x level. You are not going to get by otherwise.

Daniel, prisoner, Print Shop

The education and training programmes provided by the Department of Corrections are shaped by the New Zealand Government's education and labour philosophies and policies. This is because the Department of Corrections relies on work done by the Ministry of Education, the Tertiary Education Commission, and the Department of Labour in developing its education and training policies. Prisoner literacy and employment is therefore partly shaped by the changing understandings of literacy in the education sector, workplace, and economy. This chapter discusses the main perspectives on literacy in these policy areas. It then summarises how the Department of Corrections is working to link its education and training programmes to wider-government approaches to literacy. The next chapter looks at prisoner literacy levels in New Zealand.

The International Adult Literacy Survey (IALS)

In 1997, IALS catapulted literacy onto New Zealand's political agenda as it highlighted a large proportion of the population were lacking fundamental literacy skills (Isaacs 2005). Although the adult literacy situation had not changed dramatically (Hill 1990), the survey quantified literacy levels of the population for the first time (Isaacs 2005).[6] IALS showed 45 percent of 16-65 year old New Zealanders were at Level 1 or 2 on the IALS scale (Johnston 2004).* This meant that over a million New Zealanders did not have the literacy skills "to understand and employ printed information in daily activities, at home, at work and in the community – to achieve one's goals and to develop

* The OECD (1997, 2000) state Level 3 IALS literacy is required to participate in everyday life in a knowledge society.

one's knowledge and potential" in a knowledge society (OECD 2000, x).

The survey also framed literacy as a vital economic issue for New Zealand. Up to the late 1980s literacy was seen primarily as a human or social right – as a matter of social justice (Dakin 1996; Hill 1990). IALS linked literacy to occupations and industries, employment sustainability, unemployment, and income (OECD 1997). It found workers in blue collar, low-skill jobs generally had lower literacy levels, earned less (Johnston, 2004),[7] and were "less likely to be in employment, less likely to find work when looking for it and less likely to work regularly when a job is obtained" (OECD 2001, 38).[8]

The Knowledge Paradigm

In short, IALS reinforces arguments in the existing literature about the changing nature of work. In their literature review, Vaccarino et al. (2006) discuss changes in technology and a drive for efficiency, which result in the labour intensive factories of the industrial era being superseded by information and service type businesses. The focus on knowledge-based economic activity results in what Bullard et al. (1995) term the changing skills paradigm. Where the old paradigm saw employees master tasks, then repeat them under static conditions, the new paradigm expects them to adapt to conditions and perform a variety of tasks in a range of increasingly text-rich environments. This has created a labour-market requirement for employees with a wide range of skills and abilities (Vaccarino et al. 2006) with desirable employees needing both observable, measurable, technical, psychomotor and cognitive skills like welding or database design and enabling skills like problem solving, learning to learn, communication, and information gathering and processing skills (Bullard et al. 1995). As high levels of literacy and numeracy are seen as precursors for these skills, they are central to the knowledge economy (Vaccarino et al. 2006).

In New Zealand in coming years, the Department of Labour (2001) predicts workplaces will be flatter and more team-based. They will require multi-skilled workers with advanced communication, problem solving, and decision making skills that are able to adapt quickly to changes in the workplace. The workforce will be more diverse; have more Māori, Pacific, and older workers; and will need adaptable and generic skills and high levels of literacy to allow training and retraining as technology and 'best-practice' changes. More people will be employed in non-standard roles (e.g. part-time, self-employed) in small and medium enterprises in the private sector.

Over the last eight years the Government has located itself squarely within this new skills paradigm. The process to position New Zealand as a knowledge society began

in 1999. In education, the drive for knowledge has been to create an 'outward looking' and 'future-focussed' system by 'connecting' education to government-identified social and economic goals (Isaacs 2005; Maharey 2001; New Zealand Government 2002). Where the 1990s provided a competitive model of education with the labour market determining the nature of education provided (Isaacs 2005), the twenty-first century has seen the Government identify a goal – broadly speaking a knowledge society – then implement policies to achieve it (DPMC n.d.; New Zealand Government 2002). Economically speaking, the Government has identified a desired labour market (knowledge workers), then attempted to create it by implementing policies designed to develop workers' capacity (e.g. improve their skills, knowledge, and attitudes); influencing the labour market (e.g. promote technology, alter the regulatory environment, conduct research etc.); and improving the systems that match people with jobs (Department of Labour 1999, 2001).

Recent policy guidelines (Ministry of Education 2002, 2006b) have strategised on how to develop New Zealand's knowledge economy (or knowledge society) while simultaneously identifying the country as one already. These dual policy goals see the education system working to create a knowledge economy and at the same time trying to make participation in the knowledge economy accessible to all New Zealanders. After IALS, improved literacy and numeracy has become central both in establishing New Zealand as a knowledge economy and in ensuring all New Zealanders have the skills, knowledge, and attributes to participate in a knowledge economy (Ministry of Education 2001, 2002, 2006b).

Adult Literacy Strategies

The *Adult Literacy Strategy* (Ministry of Education 2001) outlines the Government's plan to improve adult literacy. This has two starting points: first, IALS identified that a large proportion of the population had low literacy levels, and second, that New Zealanders need high literacy levels to participate in New Zealand's high-tech, knowledge society.

The strategy aims to mitigate low literacy levels so New Zealanders have the ability to "participate fully in all aspects of life – including work, family, and the community – and the opportunity to achieve literacy in English and Te Reo Māori" (Ministry of Education 2001, 6). This means raising the literacy levels of the population, maintaining or increasing the literacy levels of the working-age population, and ensuring school leavers have literacy required for the workplace. It aims to do this

by developing capability (quality and professionalism of teaching), improving quality systems (assuring high-standard programmes), and increasing opportunities for adult literacy learning (number and types of programmes).

The document defines literacy as "a complex web of reading, writing, speaking, listening, problem solving, creative thinking and numeracy skills" (Ministry of Education 2001, 4). The definition used by the Ministry of Education comes from Workbase (1999), a literacy organisation that focuses on achieving a literate workforce. In 2002, the economic value of literacy was re-emphasised in the Government's *Growth and Innovation Framework*, which identified literacy as a basic skill, especially for work, that needs to be addressed before the full potential of the New Zealand economy can be realised (New Zealand Government 2002).

Sligo et al. (2006) note that both IALS and the *Adult Literacy Strategy* focus on the negative impact of low literacy levels without acknowledging the ways people with low literacy or numeracy are literate. This 'deficit' perspective centres on improving literacy as quickly as possible rather than the benefits of literacy to lifelong learning and participation in society.

In late 2001, the Māori Adult Literacy Working Party report, *Te Kāwai ora: Reading the world, reading the word, being the world,* recommended the *Adult Literacy Strategy* be reformulated to allow broader understandings of education and literacy (New Zealand Government 2001). The report discusses what literacy might mean from a Māori perspective and how it may be achieved. In Māori terms, being literate is much more than reading and writing in the English language. It is a tool for understanding and influencing the world; "Literacy is the lifelong journey of building the capacity to 'read' and shape Māori and other worlds" (2001, 41). This includes the ability to read and write in both English and Te Reo Māori and for Māori to be able to read the Māori world view. Literacy is important as it connects the past with the future and is central to nation building and the possibilities of globalisation.

The following year, the *Tertiary Education Strategy 2002/07* (Ministry of Education 2002) did not adopt this perspective. As yet, the group's recommendations are unactioned and Māori perspectives are seldom referred to in discussions about literacy (Isaacs 2005).

Foundation Skills

In the *Tertiary Education Strategy 2002/07,* literacy is positioned as a foundation skill. This strategy argues that foundation skills are required before learners can achieve

high-level, transferable generic or specialised technical skills that the knowledge-economy requires (Ministry of Education 2002). A knowledge economy is developed first, by raising the foundation skills of New Zealanders – primarily their literacy, numeracy, and language skills – and second, by identifying and providing the labour market with high level, technically-skilled workers.

Foundation skills "underpin the ability to learn and keep learning" and generally refer "to a bundle of skills such as literacy, numeracy, technological literacy, communication skills, teamwork, 'learning to learn' and self-confidence skills" (Ministry of Education 2002, 36). Development of literacy, numeracy, and language are central in raising foundation skills. A range of projects – from continuing to implement the recommendations of the *Adult Literacy Strategy* (Ministry of Education 2001) to policy work on improving the quality of literacy provision – were initiated to raise the foundation skills of New Zealanders (Ministry of Education 2002).

Learning for Living and Upskilling the Workforce

In 2004, the Government initiated the *Learning for Living* and *Upskilling the Workforce* projects. Together, these measures effectively guide the operation of literacy provision in New Zealand.

Learning for Living is a cross-government foundation learning project, which aims to "raise foundation skills so all can participate in New Zealand's knowledge society and contribute further to family and community" (Ministry of Education 2005c). It is framed in terms of learners achieving meaningful goals in personally relevant social, cultural, vocational, and educational contexts. *Learning for Living* aims to identify best practice in foundation learning and then expand foundation learning provision (Ministry of Education 2005c). Projects to achieve these include: (1) research to identify the essential elements of quality programmes and encourage best practice in a variety of learner-relevant contexts (Ministry of Education n.d.a); (2) replacing foundation skills with foundation competencies[9] (Ministry of Education 2005b); (3) developing Foundation Learning Progressions[10] (Tertiary Education Commission 2006a, 2006b); (4) establishing clear foundation learning quality assurance processes and standards for programmes (NZQA 2007); and (5) other projects such as developing a standardised literacy and numeracy assessment tool, introducing adult literacy educator qualifications, and participating in international research like the *Adult Literacy and Life Skills* survey (Ministry of Education 2005c).[11]

Upskilling the Workforce operates alongside and is linked to the *Learning for*

Living project. It focuses on working with businesses and industries to provide work-focused programmes, advice, or funding to improve the literacy, numeracy, and language skills of the workforce (Ministry of Education n.d.b).

Lifelong Learning

The reframing of literacy, numeracy, and language as foundation competencies (Ministry of Education 2004, 2005a, 2005b) foregrounds the idea of lifelong learning in education policy. New Zealand's future prosperity is based on the concept of continued education, with higher-level generic and specialist skills, knowledge, and dispositions building on foundation competencies (Mallard 2006; Ministry of Education 2004). In this context, literacy is not just a skill, but an essential tool for continued learning, active participation in society, family/whānau, and employment.

In 2006, the *Tertiary Education Strategy 2007-12* reinforced this emphasis stating that tertiary education is expected to deliver "educational success for all New Zealanders through lifelong learning… creation and application of knowledge to drive innovation… [and]… Strong connections between tertiary education organisations and the communities they serve" (Ministry of Education 2006b, 5). Government priorities for education during this period are to increase: the proportion of under 25 year olds with at least Level 4 NZQA qualifications; the literacy, numeracy, and language levels of the workforce; the numbers of people with advanced trade, technical, and professional qualifications (especially in areas with skill-shortage); and research-created economic opportunities. It should be noted that, although the strategy states literacy, numeracy, and language competencies form the foundation required to participate in both the economy and society, its desired outcomes are predominantly economically-orientated.

Where the *Adult Literacy Strategy* adopts a deficit approach, Sligo et al. (2006) argue that the *Tertiary Education Strategy 2007-2012* "locates literacy within a broad and holistic conception of lifelong learning and excellent employment outcomes, rather than focusing on low literacy and its solutions" (54). This being said, the strategy still frames literacy as something someone needs to have before they can obtain a job that contributes to the knowledge economy and economic development. While people with low literacy levels may be contributing to the economy or society, they are not participating in the knowledge economy or knowledge society that the Government identifies as the vehicle for growing an innovative New Zealand. A division remains between the haves (who can participate in the knowledge economy and for whom literacy is a tool for lifelong learning) and the have nots (who are marginalised in the knowledge

economy and for whom literacy is a tool for social and economic participation). This division is likely to continue as long as creating a knowledge society and providing access to this society are dual requirements of the education system.

The Department of Corrections' Whole-of-Government Approach to Literacy

Linking to educational and labour policies, the Department of Corrections is currently working to align its literacy and numeracy programmes with what it sees as a "whole-of-Government approach" to improving adult literacy and numeracy (Department of Corrections 2007c). Their goal is for prisoners to become "functionally literate and numerate and eventually achieve a nationally recognised qualification, thereby increasing their employment opportunities and enabling them to participate in further education or training upon release" (Department of Corrections 2007c, 12). To achieve this, it will require programme providers to use the standardised literacy and numeracy screening tool when it is available (Department of Corrections 2007c; Von Dadelszen 2006b). It is also looking at requiring providers to use the Foundation Learning Progressions to record learner progress and provide types of education that prisoners can continue once they are released. The Department has committed to supporting *Upskilling the Workforce* by lifting the rates of prisoners participating in basic education (Von Dadelszen 2006b). Using the Department of Labour's *Human Capability Framework* (1999, 2001), CIE can be seen as a way of improving prisoners' access to labour market opportunities by developing their skills, knowledge, and attitudes (i.e. developing their 'capacity').

CHAPTER 5
Quantifying Prisoner Literacy

What determines if you are average or not? What tells you? Where is the line? I think if you are average you won't bother learning. If you are just going to be an average in your literacy skills you're just not going to bother learning outside the box.

Luke, prisoner, Print Shop

In correctional paradigms, literature relating to prisoner literacy usually focuses on measuring prisoner literacy levels, establishing a literacy-profile of prisoners, or on the links between literacy and recidivism. This chapter looks at international and national measures and descriptions of prisoner literacy to gain an understanding of prisoner literacy levels in New Zealand. The next chapter looks at the links between literacy and recidivism in the literature.

Prisoner Literacy Surveys

Two high-quality studies – the *National Adult Literacy Survey* (NCES 1994) and the *Prison Adult Literacy Survey* (Morgan and Kett 2003) – provide a profile of prisoner literacy.[12] These studies show the prison population – compared to the general population – has a higher proportion of people with very poor literacy skills and a much smaller proportion of people with moderate literacy or excellent literacy skills. In addition, prisoners with low literacy levels were more likely to have left school early, have a disability, have parents with low levels of educational attainment, and be in prison for a violent offence. If previously employed, prisoners were most likely to have worked in low-skilled jobs with more than half feeling that their literacy skills prevented them from getting a better job. Around the same number of previously unemployed prisoners felt their literacy skills were a barrier to employment.*

The studies measured prisoner literacy levels using a scale very similar to the one used by IALS (OECD 1997). Their results showed 14-20 percent more prisoners than householders had Level 2 literacy or below (NCES 1994; Morgan and Kett 2003).

* Morgan and Kett (2003) note that while half the sample did not hold this view; half the sample had at least moderate literacy skills.

In the United States, NCES (1994) found around 70 percent of prisoners had Level 1 or 2 literacy levels compared to around 50 percent of householders. In Ireland, Morgan and Kett (2003) found 71 percent of prisoners had literacy below Level 2 compared to 57 percent of householders. A third of Irish prisoners were unable to complete the screening test and were classified as having pre-Level 1 literacy.

If this ratio were applied to New Zealand, around 55-65 percent of prisoners would have Level 2 literacy or below.* This is significantly higher than a 1993 New Zealand survey (Mudford 1993) that found 21 percent of prisoners had self-reported difficulty with reading since leaving school, 32 percent with writing or spelling, and 31 percent with number work. It is also significantly higher than Department of Corrections' 2006 figures that show 13 percent of sentenced prisoners have a literacy need and 17 percent have a numeracy need (Von Dadelszen 2006b) or 2007 figures that show approximately 10 percent of sentenced prisoners have a literacy need, a numeracy need, or both (Department of Corrections 2007c).[13]

Literacy, Education, and Ethnicity

Another way to gain an indication of the literacy levels of New Zealand prisoners is from education and ethnicity data. In their analysis of New Zealand's IALS results, Culligan et al. (2004) found a strong correlational relationship between educational attainment and literacy, and ethnicity and literacy. Specifically, they found that "the majority of respondents who were assessed as having Level 1 or 2 literacy proficiency were also within the lower secondary schooling attainment or below" and that "those people who identify as Asian People, Pacific Peoples or Māori would appear to be more at risk of low literacy proficiency… than those who identify as European" (Culligan et al. 2004, 32, 37).

Using these indicators (Culligan et al. 2004), around two thirds of the New Zealand prison population would be at risk of low literacy proficiency with 60 percent of the prison population falling in the lower secondary educational attainment category and 66 percent identifying themselves as Māori, Pacific, or Asian (Harpham 2004).† It should be noted that this does not mean that all prisoners in these categories will have low literacy levels. Rather it means that it can be reasonably expected that prisons

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* In New Zealand, 45-50 percent of the population has IALS literacy Level 1 or 2 (Johnston 2004; OECD 2000). In making this estimate it should be noted that New Zealand IALS score distribution patterns differ slightly from both the United States and Ireland (OECD 1997).

† Culligan et al. (2004) place people with no qualifications, with International Standard Classification of Education (ISCED) Levels 0-2 qualifications, or with School Certificate (Year 11) qualifications in the lower secondary educational attainment category.

have a higher proportion of people with lower literacy levels than other institutions because of their demographic composition and the education levels of prisoners. This reflects NCES's findings (1994) that the literacy levels of householders and prisoner were similar when gender, ethnicity, age, and education were held constant. NCES concluded that "differences in overall performance between the prison and household populations may be attributed to differences in demographic composition and education attainment" (1994, xix).

Prisoner Employment and Literacy Levels

In New Zealand, a breakdown of prisoners' previous employment by industry is not available. However, information from the last prison census shows around 45 percent of prisoners were in paid work before entering prison and 20 percent were on the unemployment benefit or community wage (Harpham 2004). If more prisoners than householders have low literacy levels (Morgan and Kett 2003) and if people with low literacy levels are more likely to be employed in unskilled jobs (Johnston 2004; OECD 1997), it can be reasonably expected that a high proportion of this 45 percent would have worked in unskilled jobs in the agriculture, manufacturing, construction, or trade industries. This expectation reflects US data which shows most prisoners working before being incarcerated were employed in craft, service, assembly, labour, or transportation industries (NCES 1994).

CHAPTER 6
The Department of Corrections, the Justice System, and Recidivism

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You've got people that are in situations where they are involved in criminal activities, all their friends are involved in criminal activities, and they never, cause they can't read or write, get any other input ... other than those people ... those people are conduits in the world for them. Where, if you were walking in a world where you were able to read the newspaper headings and stories and that, and you'd get a different point of view from books and newspapers and magazines of what is right and wrong and what the social society's opinions of it. Sure, you can use the twelve second news bites they have on the telly, but a lot of those are directed at an age group of around about twelve. And that can be difficult for a lot of people who don't read and write to even understand what the words are or what the meanings are, especially if they don't use them in common usage during the day.

Carl, prisoner, Print Shop

A number of the Department of Corrections' policies and interventions are based on the idea that that education and employment assist in preventing recidivism (Department of Corrections 2002). This chapter looks at the links in correctional literature between literacy and recidivism; the types of education and training programmes believed to affect recidivism; and the Department of Corrections' understanding of the role of literacy, education, and employment training in the rehabilitation process. The chapter concludes part I of the thesis, which sets out the context in which the Central Kitchen, Print Shop, CIE, and the Department of Corrections operate and the national correctional and educational policies impacting on literacy in CIE. The next part, part II, investigates how literacy is understood in practice in CIE by describing work processes and literacy activities in the Central Kitchen and Print Shop.

As discussed in the previous chapter, an disproportional number of prisoners have low literacy levels when compared with the total population (Morgan and Kett 2003; NCES 1994). In addition, lower education levels are linked to higher crime levels (Culligan 2005). However, a causal relationship between literacy and crime – or education and crime – has not been established in the literature (Benseman et al. 2005; Culligan 2005; Morgan and Kett 2003). Instead, literacy is linked to offending, rehabilitation, and reintegration by extending the range of prosocial options available to a person (Morgan and Kett 2003).

Literacy is believed to assist in the development of prosocial relationships in two main ways (Caddick and Webster 1998). First, in cognitive models of behaviour management – where thinking about behaviour is central to modifying it – literacy is used as a tool to develop and extend thinking processes as it allows access to the thoughts and experiences of others and expands a person's ability to evaluate situations and see alternative ways of acting. Second, social analysis models link literacy to social participation. Literacy is a set of adaptive skills, which enable a person to participate easily in everyday life and be a part of, integrate into, and live in a civic community; it increases opportunities for social interaction, reduces isolation, and connects them to society.

In their review of the literature, Caddick and Webster (1998) cite a 1992 study by Porporino and Robinson of 1,700 prisoners. This study found prisoners entering a basic adult education literacy programme were less likely to re-offend and spent longer out of prison before re-offending. The recidivism rates of prisoners who completed the programmes were lower than those who were released before completing them or who withdrew from them. The programmes had the greatest impact for prisoners who were initially classed as having a higher risk of re-offending. Furthermore, interviews showed a majority of ex-prisoners felt the programme helped them gain relatively stable, post-release employment and participate in everyday activities they had not been able to do before. Around a third of prisoners attributed improved family and interpersonal relationships to the training.[14]

In considering Caddick and Webster's (1998) argument it is important to note Roberts' point (1995) that literacy can only do so much; that "there is no such thing as 'literacy on its own': reading and writing are always intimately intermeshed with other dimensions of social practice" (201). As Morgan and Kett (2003) argue, low literacy levels do not cause anti-social behaviour, but restrict life choices, especially employment and through this become a predisposing factor for anti-social behaviour. "Taken in the context of the findings on educational disadvantage, there is substantial evidence that a range of social, economic and educational disadvantages interact in ways that predispose young people towards crime, or at least lessen their choices for employment, thereby contributing to other factors that cause the problems that eventually result in criminality" (21). In terms of rehabilitation, literacy is an important part of the social change process, but does not in itself cause change. Instead, literacy is related to education and employment (OECD 2001) and both these things have been shown to help offenders avoid recidivism (Adams et al. 1994; Batiuk et al. 2005; Harrison and Schehr 2004; Heinrich 2000; Smith and Silverman 1994; Uggen 1999).

Improving Education and Training for Employment

In the 1970s and 1980s vocational education* became a best-practice method of reducing recidivism (Harrison and Schehr 2004). A recent review of the literature by Harrison and Schehr (2004) found sustainable employment was central in reducing re-offending; recidivism rates remained high when ex-prisoners were not given tools to live independently and maintain employment. They found vocational guidance assistance programmes were a valuable way to achieve this if they included employer referral and job readiness skills services, provided vocational training, and taught independent living skills.[15]

Drawing on this type of literature, the Department of Corrections identifies prisoners' limited work histories and low levels of education as barriers to their employment (Department of Corrections 2006b). It provides education and training as recidivism intervention tools arguing they increase prisoners' chances of finding post-release employment (Department of Corrections 2002). A Department of Corrections' memorandum on the future direction of prisoner education states that the aim of education is to provide motivated prisoners with "high-quality, effective education that leads to the achievement of nationally recognised qualifications that increase employment opportunities and/or a prisoner's ability to participate in further education or training upon release" (Von Dadelszen 2006b, 5-6).

The Department of Corrections provides four types of education and training for prisoners (Von Dadelszen 2006b). These are foundation education,† self-directed tertiary study, trade and technical courses, and industry training. The first two are provided and overseen by the Public Prison Service, the other two by CIE.

Vocational Education and Literacy Training

Recent policy work by the Department of Corrections (2006b) is strongly focused on increasing the range, quality, and relevance of employment training, work experience, and recognised qualifications available to prisoners and on reintegrating prisoners back into the community. This *Prisoner Employment Strategy 2006-2009* – which aligns with Harrison and Schehr's criteria (2004) – has become part of the Government's *Effective Interventions* package because of its potential to reduce re-offending (Office of the Minister of Justice 2006).[16]

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* CIE is a type of vocational education programme.

† Foundation Education includes literacy and numeracy, National Certificate of Educational Achievement (NCEA), ESOL, and the National Certificate Employment Skills (NCES). The Department of Corrections believes foundation education will have the most impact on reducing re-offending (Von Dadelszen 2006b).

It is highly likely that employment training options that lead to sustainable and meaningful employment will have embedded literacy requirements. This is because literacy skills underpin a growing number of employment tasks. They are central to employment and training (OECD 2001) and are predicted to become more important with changing technology, globalisation, and increasing legislative and compliance requirements (Comrie et al. 2005; OECD 2001). From this perspective, it would seem that success in reducing re-offending would partly depend on prisoners having the necessary (literacy) skills to participate in vocational education programmes. This argument is reinforced by the recently released ALLS results (Ministry of Education 2008). ALLS found that, internationally, people with lower literacy levels were less likely to participate in formal, non-formal, and self-directed up skilling than people with lower literacy levels.[17]

Many corrections services around the world provide literacy training for prisoners. A meta-analysis of best-practices literacy programmes for corrections systems is not available. However, Johnston (2004) found that the few rigorous reviews of adult literacy and training programmes in New Zealand showed programmes could increase participants' educational attainment (i.e. their qualifications). There was some evidence that this leads to increased earnings, but little evidence that the literacy skills of participants actually increased. Johnston concludes that "it is one thing... to say that an increase in literacy skills would be beneficial for individuals (or for firms or for the economy), but quite another to say whether this can actually be achieved, what it would take to accomplish it, and how much it would cost" (2004, 45).

An Australian review of adult literacy and numeracy for vocational education and training in workplaces (Falk and Millar 2001) found that integrated approaches to teaching literacy and numeracy provided the best option for developing work-based literacy and numeracy skills. Stand-alone literacy and numeracy training provided the best option where intensive skills were required or where people did not have access to a work based context (e.g. unemployed people). Falk and Millar's paper (2001) also outlined the ongoing debate about how literacy should be defined and taught in these programmes.

In New Zealand prisons, literacy and numeracy type training is provided through a stand-alone literacy and numeracy programme, a National Certificate in Employment Skills (NCES) course, a general education course – including English for speakers of other languages (ESOL), and secondary education programmes (Benseman et al. 2006). Prison-based literacy and numeracy programmes provide specialised training for prisoners with very low literacy and numeracy levels (Benseman et al.

2006). In 2007, around 5 percent of prisoners were in literacy training programmes, 5 percent in numeracy training, and another 5 percent in both literacy and numeracy training programmes (Department of Corrections 2007c). In 2006, around 6 percent of prisoners were in literacy training programmes and 4 percent in numeracy training, down from 8 percent in literacy and numeracy training in 2003 (Benseman et al. 2006; Von Dadelszen 2006b).[18]

NCES and ESOL courses also provide training for prisoners with low literacy levels (Benseman et al. 2006). Between 2003 and 2006 the hours of NCES training provision increased by 32 percent to 827 new enrolments in 2006 and ESOL provision increased 23 percent to 92 new enrolments in 2006 (Benseman et al. 2006; Von Dadelszen 2006b). In 2003, the gender and ethnicity of prisoners receiving training was generally proportional to the demographics of the prison population (Benseman et al. 2006; Harpham 2004).

Generic Context-based Literacy and Numeracy

The Department of Corrections sees literacy and numeracy skills as a foundation for further education and vocational training (2007c). Believing literacy and numeracy should be taught in real-life contexts, they are reviewing their stand-alone literacy and numeracy training programmes to help prisoners with 'real-life' literacy and numeracy tasks like reading the *Road Code*; applying for a rental house, dog registration, or a personal or home loan; creating a budget, shopping and other everyday demands; or the generic literacy and numeracy tasks involved in unskilled work.[19] However, while literacy and numeracy are seen as important for employment, and teaching in context is preferable, there is currently no link between prison-based literacy and numeracy programmes and prison-based employment training programmes like CIE. The Department of Corrections' *Request for proposal: Delivery of literacy and numeracy programmes in prisons* (2007c) does not request that literacy and numeracy training be linked to or embedded in its CIE training programmes. This means literacy and numeracy providers are being asked to provide tutoring that may or may not be relevant to the business-like industries that the Department of Corrections runs.[20] Furthermore, providing prisoners with generic literacy and numeracy for unskilled work is unlikely to prepare them for the meaningful or high quality jobs that are necessary to reduce recidivism (Harrison and Schehr 2004; Uggen 1999).

PART II
Literacy In Use in Corrections Inmate Employment

Part II focuses on life in CIE and on literacy in CIE by describing workplace processes, structures, interactions, and communication in the Central Kitchen and Print Shop. Referring to ideas of “meaning in use” or “literacy in use” it explores the connections between the literacy, local situations, and meaning.

CHAPTER 7
At Work in the Central Kitchen and the Print Shop

Workplace learning is the formal acquisition of skills and knowledge in the workplace. It can be 'employment-based', where the learner is an employee working and learning while at their place of work, or 'work-based', where someone who is not an employee of a firm comes into that firm's workplace for the purpose of training. Knowledge and skills obtained in the workplace are formalised with assessment and the achievement of units and national qualifications.

Skill New Zealand, *Knowledge at Work*

In their research on workplace literacy Belfiore et al. (2004) use the terms "meaning in use" or "literacy in use" to emphasise the connections between the literacy, local situations, and meaning. They argue literacy is not only about performing tasks but understanding and participating in a social environment. This chapter contextualises the research by describing a normal working day in the Central Kitchen and Print Shop.* The next chapter explores some of the structures and interactions that impact on literacy in CIE in these environments.

A Day in the Central Kitchen

At 6:00am prisoners arrive for work, get changed into overalls and boots and cover their hair. Like clockwork, food is placed on the trays as they move down the conveyer belt: two weetbix, one dessert spoon of bran, 300 millilitres of milk, 15 grams of margarine, and 20 grams of spread. Each item is outlined on the four-week menu but no one is reading it. They know it all by heart and it's the same breakfast every second day.

It is relatively quiet; the main noise comes from the lids being slammed down on trays, and then trays on trolleys. Each trolley is going to a separate unit and it must have the right number of meals on it. Special (non-dairy, non-chew, brown bread, diabetic, low fat, low sodium) meals are provided for prisoners with special dietary needs. These specials trays have hand-written cardboard bookmarks slotted into them specifying the difference.

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* See table 3 (in chapter 2) for a summary of the main features, activities, and policies in the Central Kitchen and the Print Shop.

Prisoners' eyes flick up at the diagram on the wall above them showing how to stack a trolley with 24, 30, or 36 meals. It is a numbers' game. Today the muster board shows there are 32 prisoners in Unit Four.* The number 32 is written on the end of Unit Four's trolley in whiteboard marker; 32 lids sit on top of it. The trolley will receive 31 normal breakfasts and one non-dairy breakfast. Once loaded it will be delivered to the unit, either by truck or by hand.

While the trolley pullers are delivering the food, the sandwich hands have their breakfast in the mess room. "We are the muscles, we pull the trolleys... Lift and carry," a trolley puller tells me. "In other words, they aren't too bright but they can lift heavy things," another prisoners teases. "Hey mate... these meals would be going nowhere without us," he shoots back. "At the end of the day we're still here at seven o'clock when they've gone home." The men know each other well and it is a good natured exchange. I get the feeling they would keep their words to themselves if they didn't. By 7:00am the breakfasts are delivered, the dishwasher is warming up, and the trolley pullers are having their own breakfast break before collecting the empty trays and doing the dishes.

Simultaneously, the store man delivers breakfast to the special units and milk to staff. He has devised his own labelling system to manage the delivery of milk and ration out fruit. Prisoners drink a lot of milk and get two pieces of fruit a day because the nutritionist-audited national menu prescribes this. It is individually counted because fruit is expensive. When he returns he will begin checking his stock.

Conversations increase as prisoners wake up, and so does the noise. By 10:00am, when the trolley pullers and sandwich hands go back to the units, the sandwich hands have made nearly three thousand sandwiches. Normal lunches and special lunches have been labelled and delivered. Lunches for tomorrow's work gangs are sitting ready to be distributed with dinner, as are early breakfasts for workers in other CIE industries and prisoners going to court. Again, numbers must add up and Instructors check tags against contents and sign-off crates ready for delivery.

The vege hands and cooks are into their dinner preparation, both for today and tomorrow; checking menus against ingredients, and amounts against muster. The prep cook is slicing fillings for tomorrow's filled rolls: luncheon, tomato, lettuce, cheese, and onion. The rations man is portioning out ricies for tomorrow's breakfast.

The phone rings in muster changes as prisoners are received, released, or

* The muster is the number of prisoners in prison. In the Central Kitchen, the muster board records the number of prisoners are in each unit at Rimutaka Prison (see figure 8).

transferred between units. At each phone call the muster board that shows the destination of meals is changed. In turn the number of dinners going out in the first run is altered, the cooks adjust their portions, the numbers on the trolleys are re-written, and the lids re-jigged. Everything needs to be ready for when the sandwich hands and trolley pullers return for the dinner run.

At 3:00pm the conveyer line begins again as the night's meals are dished onto the square heavy plastic trays and covered with heavy plastic lids. They will keep warm for an hour. Dinners and special diet meals are loaded onto trolleys and delivered along with work gang lunches and early breakfasts. Within 20 minutes, five hundred meals have been served and are being delivered. Prisoners sit down to their own dinner while the cooks check on food for the second run. Four hundred and fifty meals later, the kitchen is cleaned up and prisoners are being escorted back to their units by Corrections Officers. It is 6:00pm and in 12 hours time the process will begin again.

It is routine and a basic one at that. Like an assembly line, each person does his job and each job feeds into the larger process: achieving the core business of getting 950 prisoners fed. As Tom, an Catering Instructor says, "Some days I walk through there and there might be three officers on the Friday morning when we've got 30 inmates. And they're all just going on the scrubber and the cleaner, and no one's telling them. No one's watching over making sure they're doing it. And sometimes I wonder how the place runs. Because… you can't run it without their goodwill... I'm here to supervise them, but I can't supervise them all the time and the work still gets done. They still find things they need to do and go and do it."

A Day in the Print Shop

As orders arrive by fax, e-mail, or telephone, the Instructor, a qualified offset printer called Kevin, writes up job bags and plans out the day. Who's getting what and when: "This job is good for so and so; we'll get the paper cut now; we'll just make the plates. Or by the way, that's pointed [urgent], we'll fit this job in; have a mini-production meeting," he says.

The paper is ordered and the guillotine begins cutting; reducing the large paper sheets to job-size stock, making sure the necessary printing margins are included, and calculating the most efficient dimensions. The stock docket is written out and goes to dispatch where the order is recorded and charged.

Clients supply print-ready files or the basic design work is done by prisoners in the digital section using Mac and PC design programmes. Digital print jobs are sent to

the digital printer where images are exposed from digital files directly to paper: like a high quality printout from the office printer, the machines appear to run unmanned, masking the work that goes into preparing the files for print.

Alternatively, plates are created from the designs and the job is run on the offset printer. Here, instead of using computer controlled digital files, the offset printer runs a machine that transfers (or offsets) images from one surface to another. The plate's image area picks up ink from the ink rollers and water keeps the ink off the non-image areas. The ink image is transferred from the metal plate, to a rubber blanket, and then to paper. It is simple in theory but takes around nine years for an offset printer to master the mechanics of the water system, ink, paper, and rollers; the physics and chemistry of colour production, chemicals, and inks; the intricacies of the trade's processes, measurements, and calculations.

Meanwhile in the plastics section, two workers are making folders for a job due later in the week. They cut vinyl and card, attach electrodes to the welding machine and weld the plastic into pockets. The card is slotted in and seams joined. Holes are drilled and D-rings riveted. One of the prisoners is designing a plastic wallet to hold a folded piece of paper. He works out dimensions and seam allowances, selects materials and electrodes and begins making a proto-type.

The digital printer comes to talk to the plate maker. He needs the plates from an old job. The client wants to alter it slightly and he needs the original to work off. When the new image is returned, the plate maker will begin separating out the image colours. Although technology is now available to do this, the Print Shop does it manually.

The plate maker blocks out the black, cyan, and yellow text and images on a page. Each primary colour has its own plate and he is making the magenta plate. Offset printing layers each ink colour onto the paper separately and a number of plates are needed to print each image: one plate will print all the black in the image, another all the cyan, another all the yellow, and another all the magenta. It is a 'four colour' job. The image components must align exactly or the final job will be blurry. Each paper-based page is photographed, developed, and then transposed onto a separate metal plate using a number of machines. They are checked and labelled and put into client folders ready for printing.

Once stock is printed, the guillotine removes the printing marks and the pages are sent to the bindery for assembly. Pages are ordered and collated; they are stapled or bound into booklets; they are hole-punched and inserted into folders; they are glued into pads. Finished products are counted and packaged for delivery or storage. Dispatch gathers the orders together,

attaches address labels and courier tickets, arranges delivery, and alters stock lists.

While the work in the Print Shop is varied and tasks reflect those in any small-scale print shop, their achievement is not critical to the functioning of the prison. This means its daily processes are less standardised or regimented than those of the Central Kitchen. Deadlines depend on orders, and Instructors and workers plan their tasks around these. As Reuben, an offset printer and prisoner says, printing is "an industry where it is a team effort and you have a hub, and generally like, the machine is the hub of the business – that's what's putting out the work – and everyone has to work around that and do their little input to make it all work."

CHAPTER 8
Literacy at Work in Corrections Inmate Employment

There is also the disparity between the fact in a normal situation it'd be hierarchal; Where it can't be because you've got other inmates telling inmates what to do and in the PPM [Public Prison Manual] it says that that can't happen; We are all the same; We are all equal... Unfortunately in this situation you've got jobs where one job dictates that, one inmate has got to tell another inmate what to do. So he has to go to the Instructor and tell the Instructor that he needs this and the Instructor will come...

Carl, prisoner, Print Shop

They've got to be motivated to change... or want to do something. You can't change people. Not in any circumstance. They have to want to change and that doesn't matter if you're in a relationship or if you're in a work thing or anywhere. If someone doesn't want to change, you can't mould them.

Tom, Catering Instructor

As can be seen in the previous chapter, there are similarities and differences between a normal day in the Central Kitchen and the Print Shop. Returning to the idea of CIE as a community of practice, CIE is a Government Training Establishment that provides training in line with national correctional and educational policies and with industry norms. Across the 140 CIE businesses, there is a degree of similarity in the way training is provided and also a degree of difference in the content of the subjects being taught. Looking at it another way, there is a degree of similarity between the structures and interactions across CIE, and differences in each business' work, processes and systems, technology, and physical environment. This chapter looks at the similar ways that structures and interactions in the Central Kitchen and the Print Shop impact on literacy in these environments. The next chapter will look at the differences in literacy in these environments.

Individual and Collective Identities

Tension between individual and collective identities permeate workplace structures and interactions in the Central Kitchen and Print Shop. Exploring this tension

provides insight into literacy in CIE. This is because it assists in understanding the social, institutional, and organisational dynamics that shape worker identities (Rainbird et al. 2004) and because participation in literacy activities relates in part to a worker's identity in the workplace (Belfiore et al. 2004; Hull 2000).[21] This section will explore the tension between individual and collective identities in prison culture and the flow-on effect this has on workplace interactions and structures. It will then look at the impact of this on literacy in CIE.

Shifting Identities in CIE

One theme observed during my fieldwork relates to workers' negotiation of their identity as individuals and as members of a group in a prison environment. In prison, life is routine, simple, basic, and systematic. In explaining how things work, prisoners emphasise that "you get all sorts in here" and that "everything [qualifications, employment history etc.] is left at the door" when you enter prison. There are written and unwritten protocols around things like prison management, prisoner responsibility, interactions between prisoners, and interactions between prisoners and staff. Prisoners must be able to adopt the identity of an individual, a member of the prison population, a worker, and a learner to successfully participate in CIE.

The way the Central Kitchen and the Print Shop operate reflects the fact that they are part of the corrections' system. At both Rimutaka and Wellington Prisons, there is limited opportunity for prisoners to control the daily routines in their lives. Each day they are released, transferred, appear in court, attend medical appointments, and go to rehabilitation programmes. For muster, scheduling, and security reasons[22] there is limited control by CIE staff of who is available for work each day. There is even less control by prisoners of where they might be tomorrow.

In addition, Department of Corrections' policies prevent prisoners giving each other instructions. Prisoners may discuss things or suggest things, says Catering Instructor, Tom, but "no one's the boss. If one of them tells the other one what to do, it turns into... usually into violence." This requirement is standard across the prison system and has implications for the way things are run in CIE. Carl, a prisoner in the Print Shop, summarises the impact of prison's non-hierarchical structures on work practices:

> In a normal workplace you've got things like the management or office that would give instructions to the next person down in the hierarchy. You don't get that here. It's very difficult for a [inmate] staff member to give instructions to another [inmate] staff member in a way that isn't considered demeaning or 'do this'. Even though procedures have been set up to circumvent that hierarchal

> system, they are not necessarily stuck to because you've got other things... like well, in the past people have sabotaged things. Like if you hand down a job bag – and it's 'sposed to follow the job around the office until its completion in offset printing, or guillotine, or dispatch – then all someone needs to do is damage that, or damage the copy or the original sheet and then, the system is stuffed. [By the] time it gets to the next person, you can't do the job.

CIE Instructors communicate individually with each prisoner about their work because of this. Once prisoners get to know each other, they may pass on information about their work onto others. However, as Daniel, a prisoner in the Print Shop says, "It's got to be less of an instruction, [and] more of a 'here's this information. I've just finished up with this. It needs to be like this,' and then you've got to leave it in their court."[23]

This means that, unlike similar businesses outside, CIE is not able to depend on teamwork or hierarchal management structures. Reuben, a prisoner in the Print Shop, says teamwork may develop, but it is not a given. Prison is more individual than the team-based printing industry outside. "[In prison] you worry about yourself and no one else really. 'I'm going to do what I've been told to do and that's done right'... Whereas on the outside your accountability is for the whole team." The narrow focus of each person on their own tasks means one prisoner is not responsible for the work of another prisoner. In turn, this means production management and quality control are the sole responsibility of the Instructor. If a machine breaks down or dinner is burnt, it is the Instructor's responsibility to fix the problem.

This does not mean that prisoners do not take on responsibilities. Although participants at both sites acknowledge some prisoners look to disrupt the workplace, most prisoners work incredibly hard to get the job done and to do it well. A number of prisoners take individual responsibility for getting work completed on time to a high standard. Although not openly expressed, self-satisfaction and pride assist in keeping the workplace running. As Rob, a prisoner in the Print Shop explains, "Everyone within their own respective job gets a certain amount of satisfaction. Like if you do a really good job, you know when you've done it good... you get that satisfaction at the end of the day. Doesn't matter what job it is, if you've done it good and it's gone sweet. You know."

Generating prisoner buy-in relies on the ability of Instructors to transverse multiple roles of prison guard, teacher, assessor, counsellor, craftsperson or tradesperson, businessperson, production manager, and boss. Instructors are part of the corrections' system and as such are distinct from prisoners. At the same time they give prisoners the opportunity to work and to learn. In the workplace, Instructors are both boss and craft or trade masters who generate engagement through good staff management, and by

providing appropriately challenging work and encouragement. For maximum benefit, each prisoner's individual learning needs, abilities, strengths, and weaknesses, need to be addressed.

In addition, CIE is an escape from the monotony of the units and helps the time go faster. Central Kitchen Business Manager, John, summarises, "The prisoners see the Officers in the wings as locking them up so they don't particularly like them that much. Whereas they tend to see Instructors as their workmates because they are all doing the same job to get a finished result. So therefore there is not that animosity towards the Instructors. They also see the Instructors teaching them things. Giving them hints on how to do things, and training them, and taking an interest.... Instructors have got to be very patient... Not be judgemental." At the same time Catering Instructor, Tom says, "What they do is they support each other... Even though we get on well them. Overall, we're still the enemy... If it had to come to it, that's where the line is."[24]

These descriptions underemphasise the unpredictable nature of prisoner responsibility. The balance between individual and collective identities is constantly shifting as things alter in the lives of prisoners themselves. Instructors are very aware of how problems in the unit or with family can result in outbursts at work. Reuben, a prisoner in the Print Shop, describes how prison life alters actions, "You can't sort of express yourself as you would on the outside, so that makes it ... more difficult ... trying to correspond. Especially, with your Instructors and that sort of thing, and I 'spose it's harder for them to be likewise. You've got to be careful what you say, and more careful in what you do. You have to… [limit your opinions as]... you don't have the influence over what you're doing as much as you would on the outside."

In addition, prisoners in CIE have their own individual identity as learners in a competency-based education system. In this nationally standardised system, they are receiving training similar to any other person in an industry training environment. This is certified by independent ITOs. CIE is a mechanism that allows a person's industry expertise to be quantified, says Rob, a prisoner in the Print Shop, "It's the same theory that every other apprentice printer, of the same level is doing out there... We are not getting under qualified. At the same time we are getting qualified equally as anyone in society at that level... and when I walk out of here I'd have gained a qualification."

As Catering Instructor, Tom mentioned earlier, it is hard to explain exactly how CIE is able to replicate a work-like situation within the shifting dynamics of the prison environment. From my observations, removing the production management and quality control aspects of prisoners' jobs creates a no-expectations culture in CIE about

the ability or inability of workers. From what I saw, this does not seem to remove individual care or responsibility. Instead, it leads to a supportive learning environment that allows people without previous experience to participate in workplace activities. At the same time, it generates a collective responsibility for getting the job done. All this is underpinned by a feeling of temporality or uncertainty in the workplace and recognition by staff and prisoners of how quickly things can change.

The Impact of Shifting Identities on Literacy in CIE

The fluidity of prisoners' individual and collective identities in the workplace and the impact of this on reporting lines, communication, and deliverables shapes literacy in the Central Kitchen and the Print Shop in two main ways: first, workplace literacy is simple, basic, and necessary; second, considering literacy without reference to ideas like motivation, human potential, and social capital is difficult.

Literacy is Simple, Basic, and Necessary

In a prison environment, literacy practices are essential in participating in legal formalities and correspondence (like permissions, rules, and regulations) and for communicating with family, friends, and the general community (Black n.d). Communication is often simplified and basic in order to treat people equally and cater for people from a variety of backgrounds. Essential things like rules are often all that is written down and there is assistance or options for people with low literacy levels.

While this sets a foundation for participation and equality, it also creates an association between authority and literacy, which is carried over to CIE. In the Central Kitchen focus group, prisoners discuss how literacy has a degree of authority associated with it and that "you can't argue as much" if something is in writing. Illustrating his point, Josh shows me a sign on the kitchen door, "It says we are allowed to take milk home Monday, Wednesday, Friday, and then below that it says 'and you may take a sugar each night'. Now I interpret that as we can take sugar home each night of the week. Then they tried to say that you can only take it each night that milk is given out, and then we pointed out that's not how it's written up there." In the Print Shop, the Instructor tells me how prisoners will refer to prison rules and regulations if it benefits them, "That's not right. Check the PPM. See if it's in there.' And sometimes they will catch Officers out because they've all day and night to read these things. They're all bush lawyers."

However, while prisoners acknowledge that reading and writing allow for

participation in official dialogue, they still feel that the ability to effect change is superficial in most cases. In the Central Kitchen, prisoners came to the conclusion that you can try but "well there's no… You can't argue in jail regardless… You just sort of stand up for your right to stand on... You don't get many rights in here." In the Print Shop, similar ideas were discussed, but at a macro level with prisoners referring to criminality, power, hegemony, and the interests of powerful groups in society in keeping "a certain portion of the population illiterate."

The impact of this is wariness or distrust of official documents by prisoners. In their research on workplace literacy, Belfiore et al. (2004) argue that perceived risk – and not necessarily low literacy levels – is an important factor in workplace literacy engagement. Considering the assessment of risk in prisoners' decision making processes, I believe perceived safeness is a major consideration in participation in literacy activities in CIE. However, because of the no-expectations culture, the risk is more often linked with the social implications of literacy activities in the workplace than with making a literacy-related mistake when completing the work itself.

An example of this can be seen in the consent process involved with my research. Agreeing to participate was often based on a prisoner's assessment of whether it was safe for others to know they talked to me about literacy in the workplace. As a prisoner explained, "There is a bit of institutional paranoia associated with prison. There are a lot of paranoid people, but there is also people who are 'I don't want to sign my name to anything'." In addition, the authority linked to reading and writing in prison makes understanding written documents crucial, "You always have to read what you're going to sign. Especially if they come running round and are in a hurry to get you to sign something. Always take your time to read it because generally they're adding more time to your sentence."

Literacy is closely linked to Motivation, Potential, and Social Capital

Workplace structures and interactions surrounding participation in education also shape literacy in the Central Kitchen and Print Shop. CIE's training focus means prisoners are encouraged to step outside the prison system and become individual learners in the education system.[25] From my observations, it seems literacy is closely tied to education and learning in the minds of participants. In turn, being literate is closely associated with opportunity and access and choice. Prisoners and staff in both industries tell me how literacy is a prerequisite for work, up-skilling, and learning in today's society and how those people with low literacy levels are disadvantaged. In

addition, as the next chapter discusses, providing prisoners with qualifications – one of CIE's major aims – requires a level of literacy and numeracy.

These observations reflect the findings of recent research into adult literacy in Wanganui (Sligo et al. 2005; 2006). In their work, Sligo et al. (2005; 2006) note close links between self-esteem, self-belief, self-confidence, self-efficacy, and motivation to learn. They also note that literacy learning is often associated with better communication and interactional competencies by learners, a sense of purpose, belonging, and being a valued or useful member of society.

Sligo et al. (2006) argue that these linkages show the importance of considering literacy within the context of the whole person. Literacy is so entwined with a person's identity and potential that it is difficult to consider without reference to social frameworks and work contexts. From my fieldwork, I would argue that understanding literacy (or learning or education) in CIE is difficult without reference to prisoners' perspectives on motivation, potential, and social capital.

Staff and prisoners in both industries are aware that prisoners often have lower levels of literacy and education attainment than other social groups, and they may not have been employed before coming to prison. In interviews and focus groups, participants talked about how these variables were closely linked to poor family support or inadequate role models; an inflexible education system; and glass ceilings and other barriers created by social class, social structure, and cultural capital. People with low literacy levels are not stupid, instead, low literacy levels stem from health problems, social disadvantage, inflexible social structures, or system failures.[26]

Prisoners also noted that people with low literacy were less well equipped to take up opportunities and that literacy gives people life choices. For Josh, a prisoner in the Central Kitchen, "People like that… might miss out on other opportunities that they would probably be good at because they don't have the confidence to be able read something or sign like a bit of paper or something like that."

My fieldwork shows that recognition of the social impacts of literacy is accompanied by the firm assertion that individuals are responsible for effecting change. This does not mean individuals should not receive assistance or support. Rather, the ultimate motivation for change is personal and needs to come from the individuals themselves.

The contrast between individual and collective responsibility surfaces again and again in my fieldwork. Prisoners in my focus groups acknowledged the social disadvantages a number of their peers face, and how these disadvantages made staying offence-free difficult. However, for themselves, responsibility for offending sits with

them personally. Likewise, while a suitable environment can facilitate change, change can only occur if a person is motivated to effect it. Motivation for training says Frank, a prisoner in the Central Kitchen, comes from a desire of "bettering yourself … If you didn't have those skills … If you're willing … Didn't feel embarrassed … Don't feel … incompetent … [It's] up to each individual … How much drive you've got."

Similarly, genuine motivation for participating in CIE depends on a prisoner's self-identified need and value of the experience, skills, training, or education being offered. As mentioned earlier, some prisoners participated in CIE solely for the small wage they receive; others to get out of the unit; and others to show their commitment to prosocial employment for the next Parole Board hearing. Prisoners have a degree of choice about the CIE industry they work in. From my observations, decisions about where to work are not necessarily rational and depend on prisoners' perceptions of how each job will benefit them, either now or in the future. There is a strong feeling among prisoners in the Central Kitchen that work and training need to be relevant, applicable, and mesh with their interests and career aspirations to motivate them to fully engage in it; if it does not mesh, engagement is not as strong.

Furthermore, access to opportunity is critical in enabling learning. In his research on learning culture and lifelong learning, Freyer argues (Culligan 2005) that people, who would benefit most from learning, miss out because they do not know about or cannot access learning programmes. As Rob, a prisoner in the Print Shop argues, motivation can be cultivated and encouraged through the opportunity to become engaged in education:

> From my experience, I was going to come to jail and just kick back and relax for my whole sentence. Then I got a job in the Print Shop and I started doing that theory and that just led, that created something, led onto something else. I've dropped that now, finished it and I'm working on my degree. And I never ever believed before I came to jail, ever thought in my life, that I'd ever be a printer or that I'd ever do a degree. Thought I'd run out of time. But, I now realise that I can do that. Then I'm going to do exactly what you're doing. I'm at some stage going to do a thesis and I'm really looking forward to it.

Literacy is thought about in the same way. In the Central Kitchen, Business Manager, John tells me literacy training would not have a significant impact on work in the kitchen because of the repetitive nature of kitchen work. However, it would definitely reduce a lot of re-offending by providing prisoners with more choices and opportunities. At the same time the motivation must come from the individual and literacy is not required to facilitate this. "If they want to learn they will go out and learn… If I could

not read or write for whatever reason and I wanted to get out of the rut I was in and I wanted to learn and do something, get a driver's licence, whatever, then I would learn. Whether it takes you six weeks or six years - individual's choice. But if I just want to sit on my butt, and watch TV, and do drugs or drink beer or whatever, then that's my choice as well. And you are not going to change that."

Black (1991) explores similar linkages between literacy, motivation, social capital, and potential in his Australian research on engagement in literacy programmes. He argues that it is simplistic to assume that prisoners do not participate in literacy programmes because they are not interested in bettering themselves or because they are embarrassed. Rather, prisoner approaches to literacy depend on a variety of factors including the context, their individual characteristics, their actual literacy abilities, and the costs and benefits of seeking assistance (n.d., 1991).

Black (n.d., 1991) identifies a continuum of participatory behaviour for literacy. At one end of this continuum, participation is "emotionally orientated" and dependent on feeling safe. Prisoners here are embarrassed or ashamed about their literacy abilities, have poor academic self-esteem, are reluctant to show their weakness, and often blame literacy for their problems. For emotionally orientated people, these dispositional barriers are the main barriers to participation. At the other end of the continuum, participation is "rationally orientated" and dependent on perceived tangible benefits. Prisoners are seldom embarrassed about their literacy abilities, have high self-esteem, and self-determine their need and terms for assistance. For rationally orientated people, non-disposition barriers (like clashes with prison jobs or other programmes, being in segregation, access to education, teaching methods, and lack of information) are the main barriers to participation.

Black's research shows a variety of motivators for engaging in prison-based literacy programmes (1991). For his participants, the effects of being in prison create a need or provide an opportunity (time, resources, support, etc.) to improve literacy and/or do something constructive. These include the need or desire to communicate or help others, gain knowledge or skills, develop themselves, or improve their opportunities (e.g. work) in preparation for release.

From my fieldwork, it seems similar factors motivate participation in CIE and engagement with literacy in CIE. The success of training in a prison depends on whether the programme is flexible enough to operate in a prison environment; whether it provides opportunities for learning (including access to specialised support services like literacy programmes); and whether it engages prisoners in learning. Engagement in

learning can develop over time through access to programmes, or it can be immediate if programmes are already in areas of interest. Engagement is not achieved by informing prisoners of the importance of learning or directing them to become engaged.

Likewise, engagement in literacy in CIE depends on whether it is safe or suitable to participate in literacy activities in each workplace; whether there is an opportunity to participate (including access to specialised support services like literacy programmes); and whether prisoners are interested or see benefits in participating. These things are influenced by participants' characteristics, world views, and backgrounds; their views and understandings of literacy and CIE; each workplace's physical, institutional, and organisational environment; and the social, cultural, political, and economic context in which the Department of Corrections operates.

CHAPTER 9
Literacy for Work in the Central Kitchen and the Print Shop

The ones who want to learn and do have the literacy and they tell you. The ones that just want to do a job, and do their lag... they say 'I just want to be in the kitchen, just want to pull the trolleys', or 'I just want to make sandwiches and that's it for my lag', and that's fine. Now they don't need the literacy to do that... It's probably not rare that they want to learn. It's just they can't learn because they can't read and write. They may want to learn, and we'll teach them, but they can't actually get the unit standards because they can't do the tests.

John, Central Kitchen Business Manager

We... qualify up to Level 3 anyway. Most of the guys can manage that. Probably at least 70 percent of the guys would manage that without getting too excited. There are a few that won't.

Marcus, Print Shop Business Manager

In literacy circles, it is becoming increasingly acknowledged that literacy is conditioned by the environment in some way or another (Black n.d., 1991; Moore and Benseman 1996; Roberts 1995). As noted in the previous chapter, prison's influence on inmates' individual and collective identities shapes literacy in similar ways in both the Central Kitchen and the Print Shop. This chapter looks at differences between literacy in the Central Kitchen and the Print Shop that arise from the varying subject matter, work processes, systems, and technology in these environments. It does this by describing the literacy required for participation in work and training at each site.

Literacy for the Job, Literacy for the Organisation

As chapter 3 illustrates, there are a number of ways of defining literacy and a number of different metalanguages for discussing literacy activities. In considering literacy at each site, a standard for comparison is required. ARLA Workbase, a workplace literacy development organisation advocates looking at workplace literacy from three angles: (1) reading and writing for the job, (2) reading and writing for participating in the organisation, and (3) reading and writing for participating in the industry (Moore 1993). In the context of this research, (1) literacy for the job relates to the specific literacy required to participate in each role in the Central Kitchen and the Print Shop (e.g. to be a chef or an offset printer); (2)

literacy for participating in the organisation adds to this the 'CIE literacy' discussed in the previous chapter; and (3) literacy for participating in the industry adds to these the literacy required to achieve ITO qualifications in catering and printing.

In the context of this research, literacy is not restricted to just reading and writing. In 2006, Workbase published a descriptor tool for thinking and talking about literacy in the workplace and in industry training (Workbase n.d.a, n.d.b, 2006b).[27] The tool, summarised in appendix 5, describes the literacy used in the workplace in terms of the levels of reading, writing, speaking and listening, numeracy, and critical thinking needed to perform common work tasks.

The following sections use the parameters provided by the descriptor tool (Workbase 2006b) as a starting point for discussing literacy. These insights are combined with fieldwork observations, workplace documents, and interview material to describe literacy, first in the Central Kitchen and then in the Print Shop.[28]

Literacy in the Central Kitchen

In the Central Kitchen, prisoners need a number of skills besides literacy to participate in work. CIE job descriptions state that the industry provides prisoners with general hospitality, catering, cooking, meal preparation and kitchen skills as well as time management, workplace relationships, safety awareness, and cleaning skills. They identify worker prerequisites as high standards of personal hygiene, good communication and listening skills, ability to work as members of a team, ability to use initiative and work with minimum supervision, and self-motivation and willingness to learn. Prisoners must be able to work with other prisoners regardless of their offence, and must have passed their health clearances.

In terms of literacy and numeracy, staff in the Central Kitchen see literacy and numeracy as the ability to read, write, and calculate to around Year 8 or Year 9 level. CIE job descriptions state prep cooks, cooks, drivers and store men need average literacy and average numeracy; trolley pullers need average literacy and basic numeracy; and dishwashers, sandwich hands, PCUs, and vege hands need basic literacy and basic numeracy.

In practice however, low literacy or numeracy levels do not seem to prevent entry to any position. Health and security issues aside, the job requirements outlined above can be taught or worked around. "We just get given A, B, and C prisoner and they're going to be your workers," says Business Manager, John. "You've got to take everyone… accept everyone who's there for you." When a vacancy arises in the Kitchen, prisoners are interviewed by Instructors for the position. If employed, a process begins.

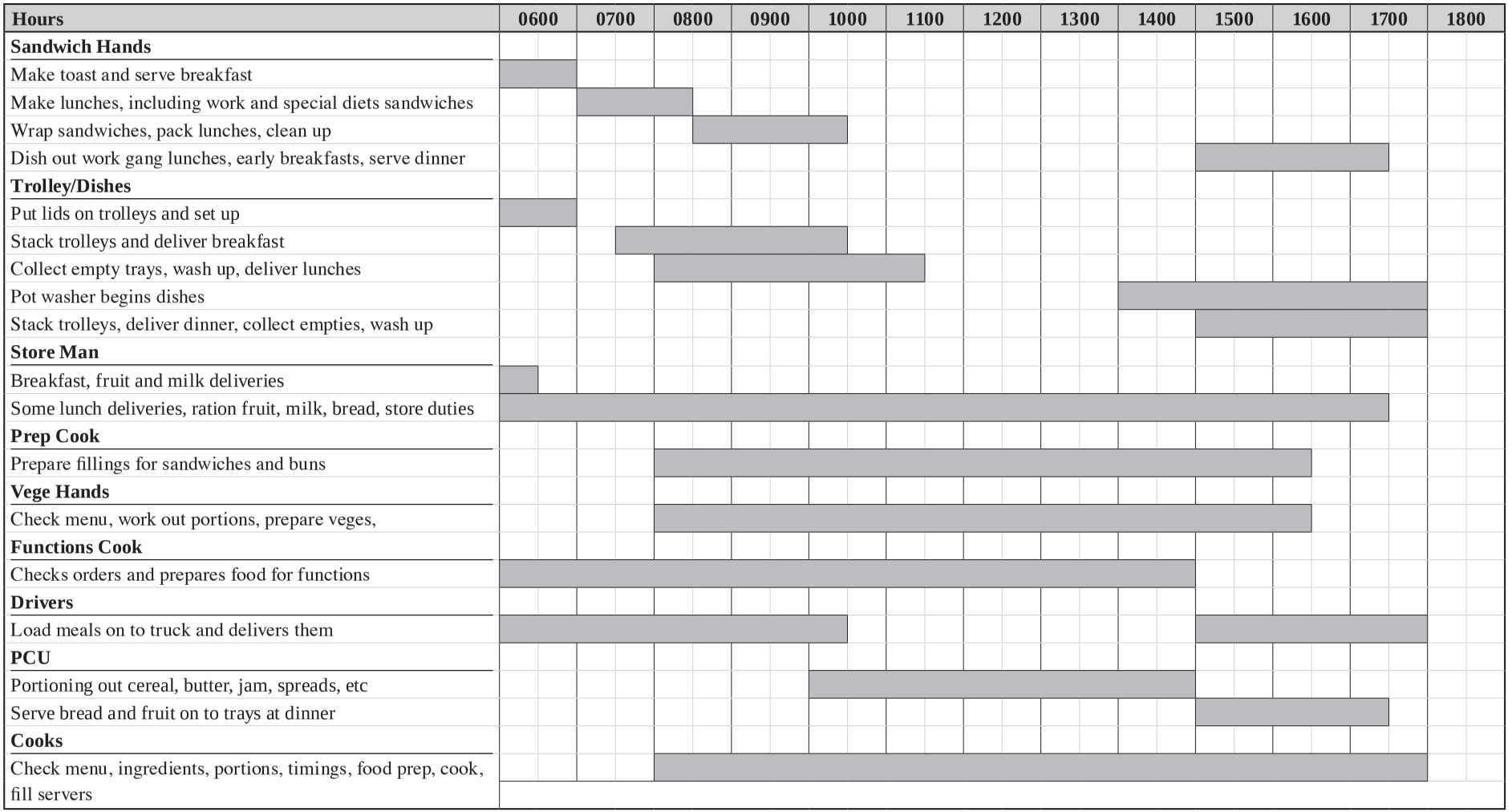


Figure 3. Work tasks and timings in the Central Kitchen by job. Most tasks are highly standardised and need to be performed at a certain time to ensure breakfast, lunch, and dinner are delivered on time.

Prisoners are inducted into the Kitchen: they are told the rules, the hours, what not to touch, and given health and safety information. Generally starting as a trolley puller, they progress to a sandwich maker, vege hand, or cook, depending on their attitude and ability. "If you show some initiative and hard work then you may [progress]," says Catering Instructor, Tom. "Maybe you're a bit older or not as strong, we move you perhaps to the sandwiches. Then if you're at the sandwiches and someone leaves from the vege room... then maybe over there. Or if they show real initiative and they want to work, then they may move into the cook's position."

As figure 3 illustrates, each job is designed to feed into the larger goal of achieving the industry's core business and each task is simplified and stream-lined to ensure it can be completed by most, regardless of their literacy ability, work history, or experience in catering. From my observations, literacy and numeracy is woven into a number of workplace activities. Some of the tasks and the communication activities involved in these are outlined in appendix 7.

Workbase Literacy Levels

Literacy in the Central Kitchen is mainly industry-specific with each role engaging with relatively similar texts. Table 4 shows the Catering Instructor's estimates of reading, writing, speaking and listening, numeracy, and critical thinking levels in Kitchen roles using the Workbase descriptor tool. The remainder of this section places these standards in context by describing the social and operational aspects of literacy in this environment.

The Workbase Literacy Levels in table 4 described the technical literacy processes involved with work in the Central Kitchen. In the Central Kitchen, reading tasks are static. The routine means that texts seldom change and prisoners do not receive new texts to read on a daily, weekly, or even monthly basis (see figures 4-6 for examples of common workplace texts in the Central Kitchen). As one prisoner puts it, "You just basically know what to do because you know what to do." Like workplaces outside, reading is seen as important because it provides workers with the information they need to do their jobs. "That's a priority, you have to," is the instant response to another prisoner commenting that they read a lot in their last job before prison, "just to keep up to date with new products and techniques and things." It is an opinion reflected by Business Manager, John, "You've got to be able to read instructions. You've got to follow all the health and safety procedures that are in each industry... It's everything. You have someone going for a job and you've got to know how to read or write or they just won't take you on will they? In a

Table 4. Workbase Literacy levels of jobs in the Central Kitchen

Level	Description
Reading 4	Work tasks require recognition and interpretation of pictures, symbols, abbreviations, and codes like safety signs or colour codes; recognition of relevant technical vocabulary like equipment names and parts; and the ability to read and understand very short texts like notices, labels, dials and gauges and short documents like job specifications, whiteboard notes, memos or notices, or product information. This requires comprehension of sentences and paragraphs of text usually up to one or two pages long.
Writing 2	This means work tasks require completion of simple workplace documentation like entering times, dates, and/or product names on forms. This requires the construction of letters, words, and numbers but does not require building complete sentences.
Numeracy 4	This means work tasks require recognition and understanding of alphanumeric codes like product codes or labels combining letters and numbers; understanding of a range of numerical concepts as they apply to specific jobs like temperatures, measurements, time, proportions, ratios, decimals, and fractions; recording of data from workplace observations or measurements using numbers and words like recording ingredients and weights used, counting or estimating stock, or compiling orders (often with a calculator); and carrying out simple calculations for specific work tasks like calculating portions often with measuring and weighing equipment.
Speaking and Listening 3	This means work tasks involve listening to procedures and verbal instructions and responding appropriately; understanding and using technical and industry terms like names and abbreviations for materials, products, and processes; and giving factual information and checking for understanding like explaining procedures to others, reporting problems, or seeking help. This involves using multiple words, but not necessarily in a formal manner or in a grammatically correct way.
Critical Thinking 1	At Level 1, workers are able (or have the authority) to identify when workplace procedures are not being met and take appropriate action.

Source: Data from Workbase literacy level descriptions (Workbase 2006a) and Instructor interview.

Note: Literacy in the Central Kitchen is mainly industry specific with each role engaging with relatively similar tex.

lot of work... Not just kitchens... but in a lot of workplaces."

The well-developed process means prisoners do not have to write anything down to do their jobs. This does not mean they do not use writing to assist them with their work (see figure 7). As Rob, a prisoner notes, literacy is important across workplaces because "usually in most jobs you have to jot something down, or remember something, or add something."

The changing muster means meal numbers are constantly changing and prisoners frequently need to adjust rations, portions, timings, and amounts. Numeracy is important because it is needed in almost every role. Catering Instructor, Tom says, "Timings and the numbers… the numbers we're feeding and the numbers of trays, and the numbers of fruit that we use, and the milk etc.., they all need to be counted out. The numbers of rows for sandwiches… [There are] a lot of numbers that they've got to use for things." The importance of basic arithmetic and estimation is also recognised by prisoners, "Well, it's like our job on the trolleys. If we stuff up on the lids and the trays, mate, and we take our trolleys up to the pods with meals on... We get up there, half an hour later, they ring up... saying you got four meals short," says Ted. Similarly, Rob expands, "You've got to know to slow down and minimise the serving portion, speed it up. Other times load it up so there is not heaps left over or something." Frank continues, "It's just like measuring with the eye." Although number work is important in the job, the same calculations and estimates are regularly repeated. The repetitive nature of the numeracy tasks makes them simpler than if calculations changed frequently. In addition, there are a number of tools in place to assist prisoners with numeracy tasks (see figures 8-11).

In the Kitchen, it is hard to tell whether prisoners are less adept at number work or if there are more numeracy tasks required in the job than reading or writing ones. However, Catering Instructor, Tom, notes that numbers seem to be the hardest part of the job for many prisoners. "Calculating the numbers seems to be the worst part for them. They don't seem to be so bad on the reading and writing those guys. But certainly the numbers."

The static nature of reading and the limited use of writing make speaking and listening central in communicating. "Those people who can't read and write, they can listen and talk, even though they can't read and write, so, they can still learn things without having to read it," says Rob, a prisoner. Staff cover requirements with prisoners either individually or in small groups. Prisoners communicate with each other to get their jobs done and to coordinate their work. However, they are careful not to tell other prisoners what to do. Communication is seen by prisoners as a critical part of their jobs because, as Frank, a prisoner says, "Communication… yeah you've got to have good communication

because without that everything's going to go to pieces, aey... That's the key part to having a good working team isn't it?"

There are few opportunities in the Central Kitchen for prisoners to use critical thinking or problem solving skills. "The main focus here is delivering 950 meals, three times a day. They need to be right, on time, and up to scratch. That is core business – end of story," says Business Manager, John. "That takes precedence over anything, because, if you don't feed them we've got a big problem. And it's not just CIE. It's the Prison Service as well in that they are going to have prisoners rioting... That affects everybody." Everything reflects this: each job is designed to feed into the larger goal of achieving core business and each task is simplified and stream-lined to ensure it can be completed.

The responsibility for the entire process lies with staff and trouble-shooting is firmly their responsibility. "Ninety percent of the time it's from us," says Catering Instructor, Tom. "An inmate can have input into it. Or if there is a problem that he sees that hasn't come to our attention he'll come to us and say, 'Hey, this is happening, we can fix this up,' but that's only ten percent, maybe even less than ten percent of the time – three to four percent."

Aside from abiding by the rules, there is no requirement for prisoners to identify when procedures are not being met. This is not to say that prisoners do not care about the outcomes. As one prisoner jokes, "It's in our interest not to poison the other inmates and get trouble because of it… and none of us want to eat contaminated food either."

Dual levels of literacy and numeracy operate in the Central Kitchen. On the one level, work requires the literacy outlined in table 4; on another, the well-developed process means that literacy can be eliminated from many roles. In practice, this process identifies low levels of literacy as a barrier to achieving core business, and removes the need for literacy in many work tasks. It also removes the variance between the literacy requirements of each job; so reading, writing, and numbers (and in some cases verbal communication) are not barriers to progress. As Catering Instructor, Tom says, the cooking is the hardest, not because of the literacy required for this job, but "because there is more responsibility and pressure to get it right... Too much pepper in it, or too much curry, or too much chilli; it's nine hundred and fifty meals down the drain."

The work processes are so strong that the Central Kitchen is able to employ workers who do not read, write, calculate, or even speak English. After a translator (usually another prisoner) is used for the induction process, workers simply pick up the job by being shown. Limited communication makes it harder for both staff and prisoners, but they work around it. As Catering Instructor, Tom says of one such prisoner, "I think basically he just follows

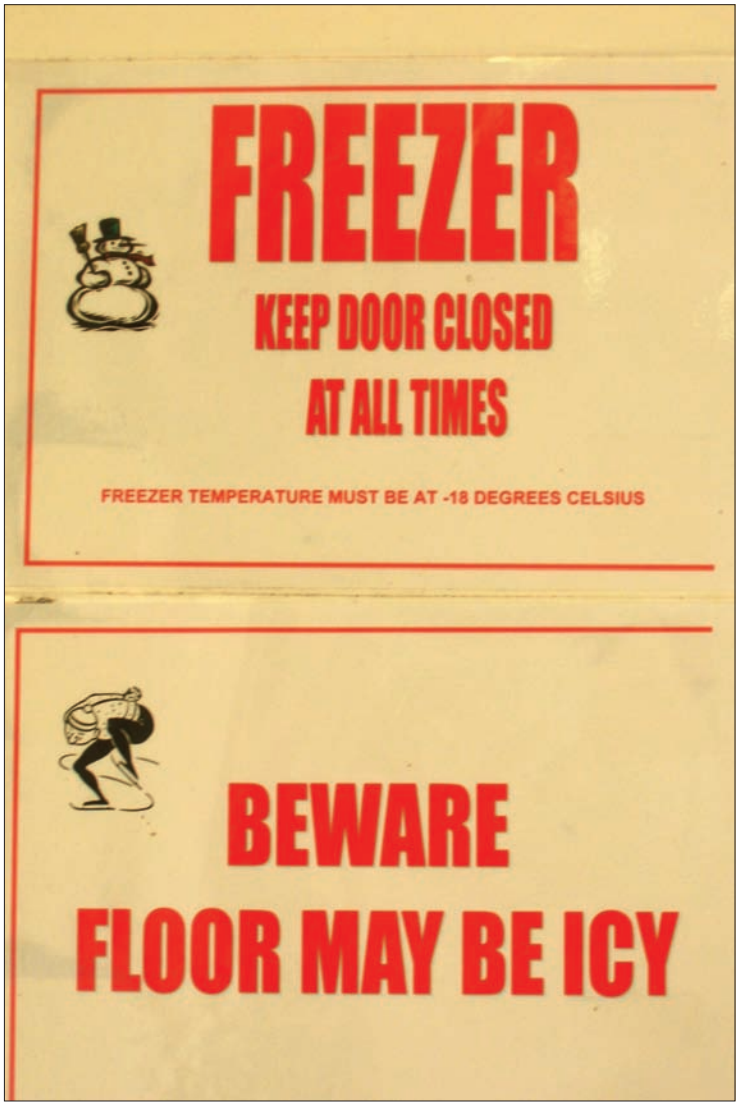
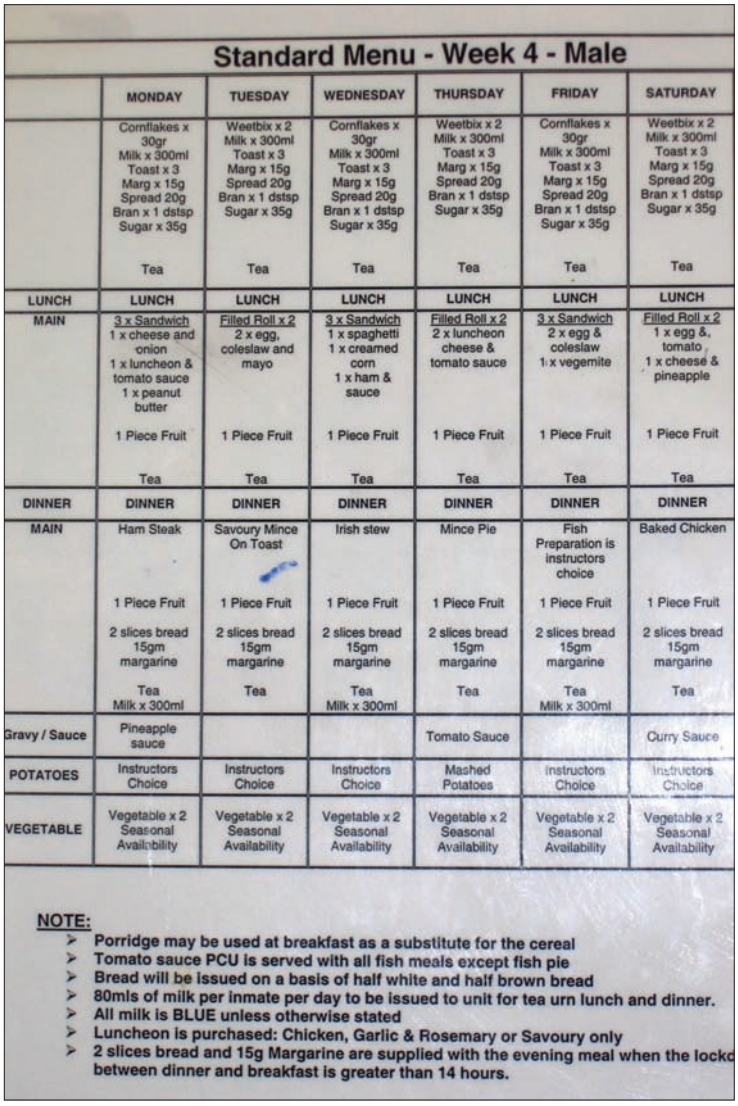


Figure 4. Two signs on the freezer door in the Central Kitchen. Workplace texts rarely change and reading is relatively static.



Standard Menu - Week 4 - Male

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	Cornflakes x 30gr Milk x 300ml Toast x 3 Marg x 15g Spread 20g Bran x 1 dstsp Sugar x 35g Tea	Weetbix x 2 Milk x 300ml Toast x 3 Marg x 15g Spread 20g Bran x 1 dstsp Sugar x 35g Tea	Cornflakes x 30gr Milk x 300ml Toast x 3 Marg x 15g Spread 20g Bran x 1 dstsp Sugar x 35g Tea	Weetbix x 2 Milk x 300ml Toast x 3 Marg x 15g Spread 20g Bran x 1 dstsp Sugar x 35g Tea	Cornflakes x 30gr Milk x 300ml Toast x 3 Marg x 15g Spread 20g Bran x 1 dstsp Sugar x 35g Tea	Weetbix x 2 Milk x 300ml Toast x 3 Marg x 15g Spread 20g Bran x 1 dstsp Sugar x 35g Tea
LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
MAIN	3 x Sandwich 1 x cheese and onion 1 x luncheon & tomato sauce 1 x peanut butter 1 Piece Fruit Tea	Filled Roll x 2 2 x egg, coleslaw and mayo 1 Piece Fruit Tea	3 x Sandwich 1 x spaghetti 1 x creamed corn 1 x ham & sauce 1 Piece Fruit Tea	Filled Roll x 2 2 x luncheon cheese & tomato sauce 1 Piece Fruit Tea	3 x Sandwich 2 x egg & coleslaw 1 x vegemite 1 Piece Fruit Tea	Filled Roll x 2 1 x egg &, tomato 1 x cheese & pineapple 1 Piece Fruit Tea
DINNER	DINNER	DINNER	DINNER	DINNER	DINNER	DINNER
MAIN	Ham Steak 1 Piece Fruit 2 slices bread 15gm margarine Tea Milk x 300ml	Savoury Mince On Toast 1 Piece Fruit 2 slices bread 15gm margarine Tea	Irish stew 1 Piece Fruit 2 slices bread 15gm margarine Tea Milk x 300ml	Mince Pie 1 Piece Fruit 2 slices bread 15gm margarine Tea	Fish Preparation is instructors choice 1 Piece Fruit 2 slices bread 15gm margarine Tea Milk x 300ml	Baked Chicken 1 Piece Fruit 2 slices bread 15gm margarine Tea
Gravy / Sauce	Pineapple sauce			Tomato Sauce		Curry Sauce
POTATOES	Instructors Choice	Instructors Choice	Instructors Choice	Mashed Potatoes	Instructors Choice	Instructors Choice
VEGETABLE	Vegetable x 2 Seasonal Availability	Vegetable x 2 Seasonal Availability	Vegetable x 2 Seasonal Availability	Vegetable x 2 Seasonal Availability	Vegetable x 2 Seasonal Availability	Vegetable x 2 Seasonal Availability

NOTE:

- **Porridge may be used at breakfast as a substitute for the cereal**
- **Tomato sauce PCU is served with all fish meals except fish pie**
- **Bread will be issued on a basis of half white and half brown bread**
- **80mls of milk per inmate per day to be issued to unit for tea urn lunch and dinner.**
- **All milk is BLUE unless otherwise stated**
- **Luncheon is purchased: Chicken, Garlic & Rosemary or Savoury only**
- **2 slices bread and 15g Margarine are supplied with the evening meal when the lockc between dinner and breakfast is greater than 14 hours.**

Figure 5. An A4 Standard Menu (male, week 4) is pinned to the wall in the Central Kitchen. The menu indicates the food to be prepared and the portion size each prisoner should receive. Meals, which rotate on a four weekly cycle, are planned by nutritionists. Some meals repeat more than once during each month. Each day, the same meal is prepared in every prison kitchen around the country.

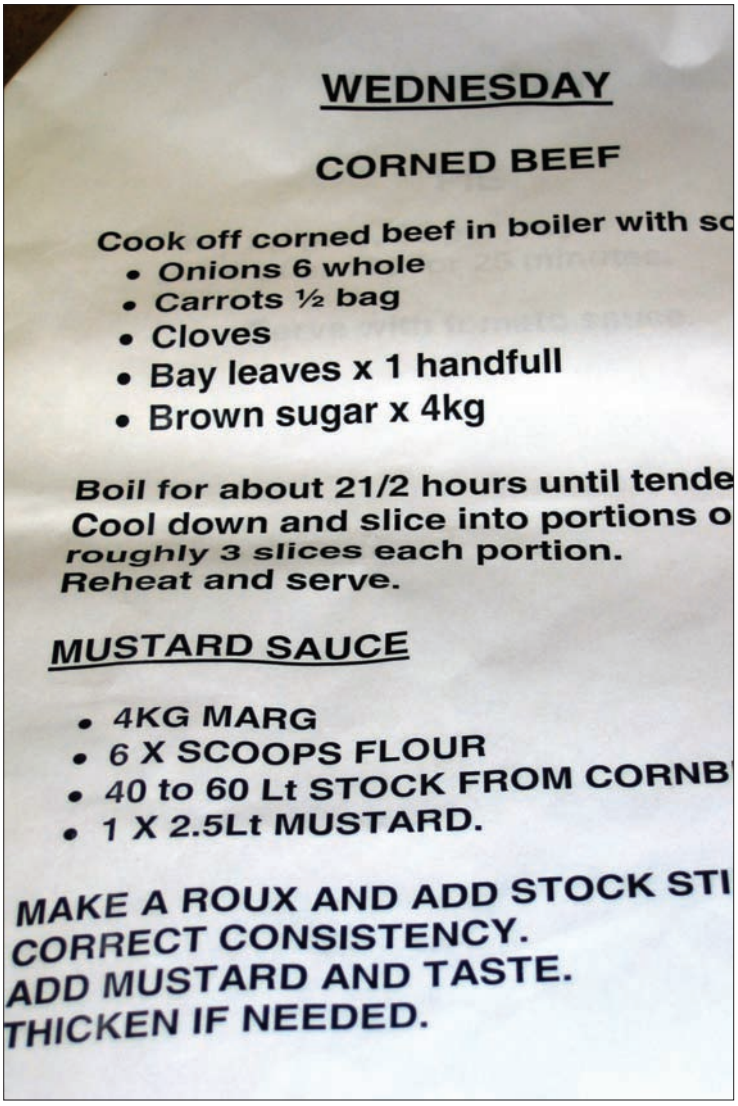


Figure 6. Recipe for Corned Beef. Corned Beef will be prepared in this way every time it is on the menu. The recipe is one of around twenty in an A4 booklet, stapled together in the top left hand corner and sitting at the back of a shelf near the ovens.

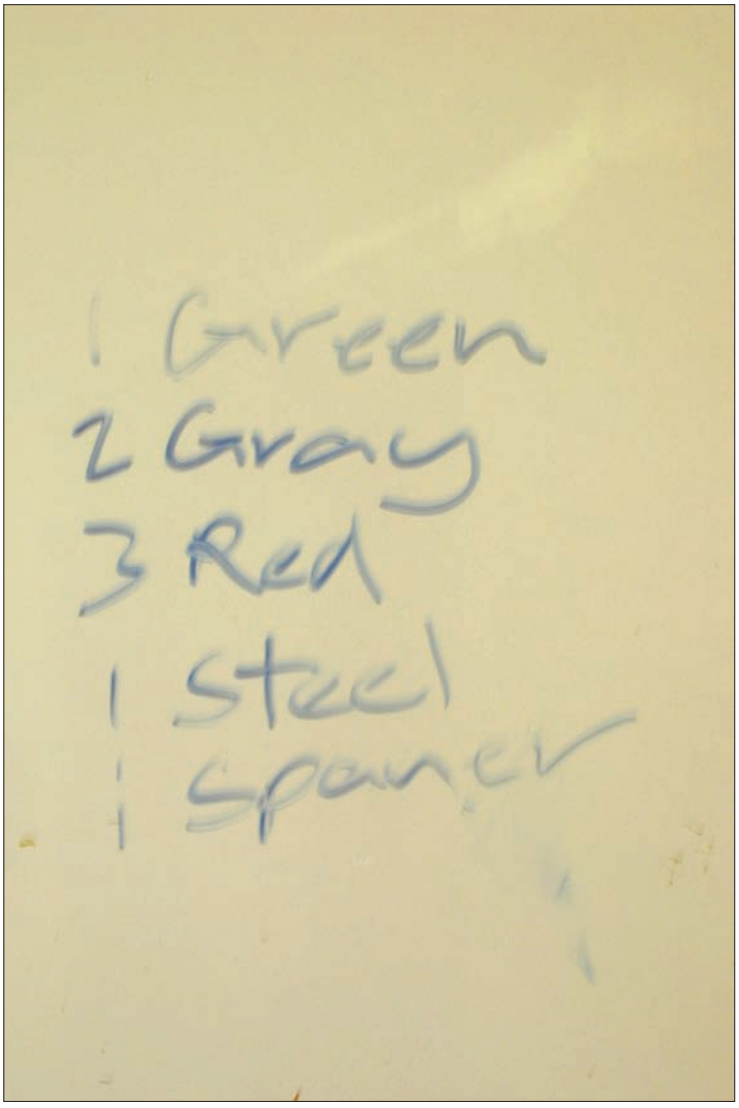


Figure 7. A note made by a prisoner in whiteboard marker on the stainless steel wall in the Vege Room in the Central Kitchen. This note reminds a prisoner which knives he will have to sign back in at the end of his shift.

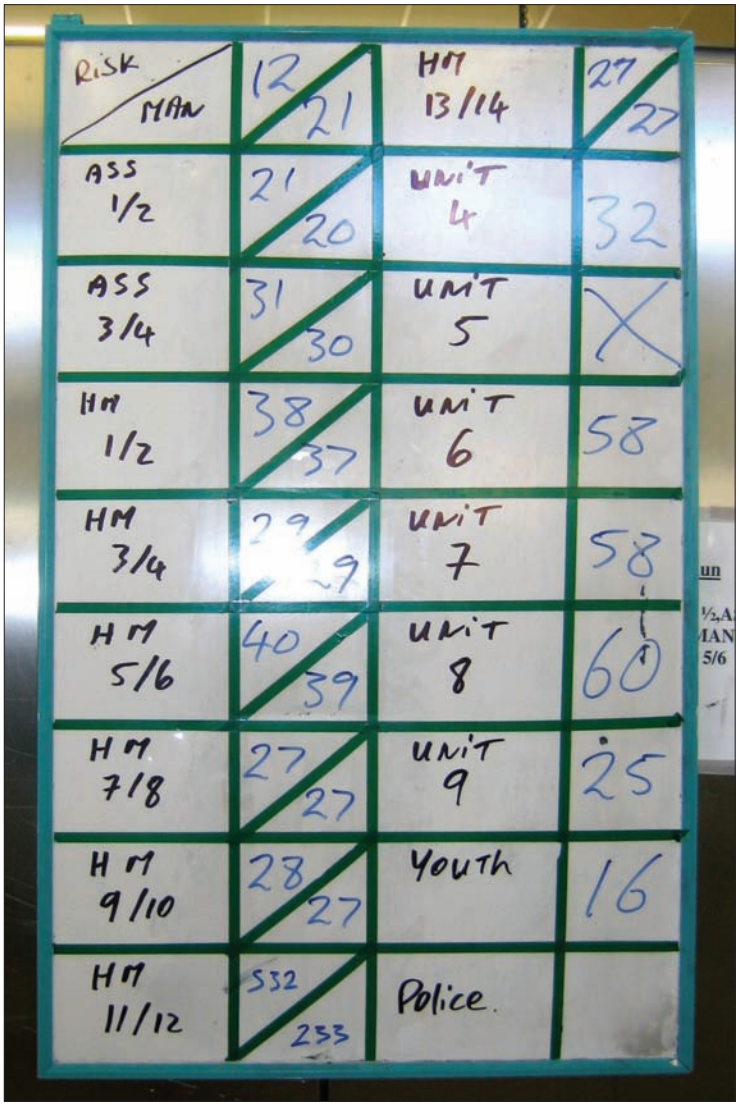


Figure 8. The muster board hangs on the wall in the Central Kitchen and indicates the number of meals each unit needs. While the words do not change, the number of meals going to each unit changes constantly as prisoners are released, received, or transferred. Prisoners use these numbers to calculate the number of meals to prepare, to work out portions, and to stack the trolleys.

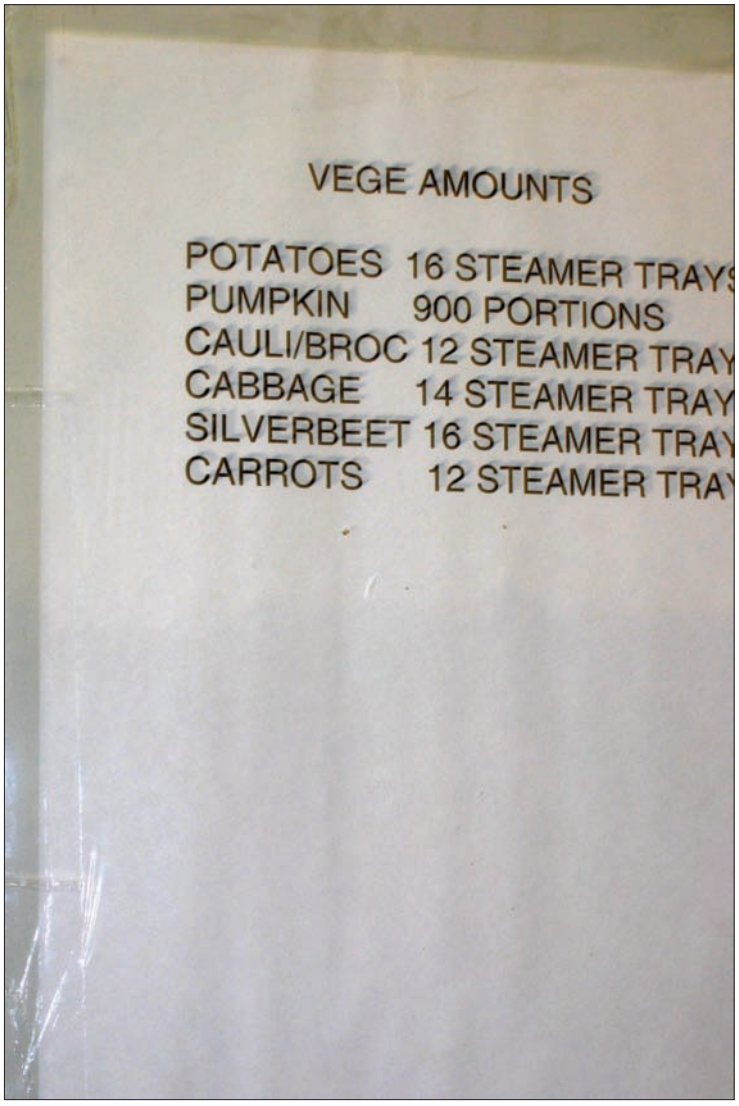


Figure 9. A “Vege Amounts” list is stuck on the wall in the Cook’s area of the Central Kitchen. The Cook can use the tool to determine how many trays of veges need to be prepared to feed 900 prisoners.

Figure 10. Checks and balances: Unit HM5's trolley sits in the trolley park area in the Central Kitchen. The number 28 is written on the end of the trolley in whiteboard marker. This indicates how many meals need to be counted onto it. Twenty eight trays sit on top of the trolley. As each meal comes off the conveyer belt, a lid is placed on top of it and it is stacked on the trolley. When all the lids are gone there should be 28 meals on the trolley.

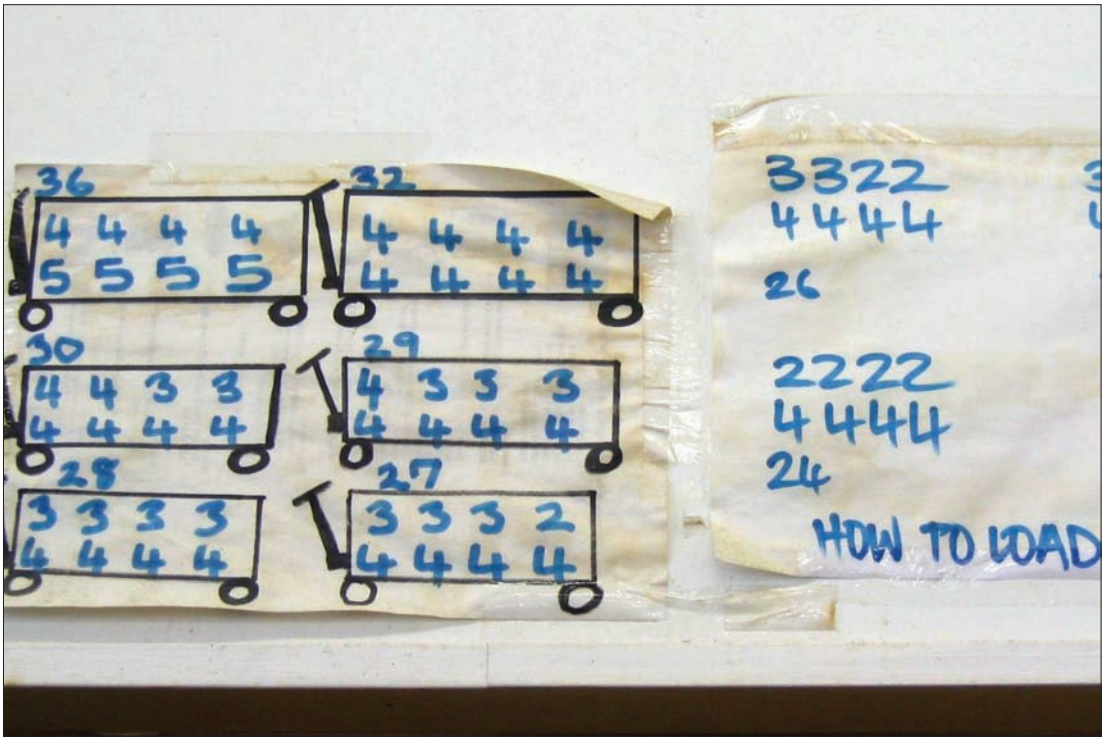


Figure 11. Trolley pullers' "how to load the trolleys" diagram is stuck to the wall near the conveyer belt in the Central Kitchen. The diagram depicts how trolley pullers should stack various numbers of meal trays onto a trolley. It provides another check in the process. For example, if the meals going to Unit 5 (see figure 9) are stacked like the picture at the bottom left of this diagram, trolley pullers know they have 28 meals on their trolley.

them [the other prisoners]... Someone else will go and get the stuff and he'll just follow what they do… the others will bring it out, he just does it, doesn't question." A comparable style of non-verbal communication – where prisoners use hand signals and pointing – is used in areas where it is too noisy to speak.

Other techniques are used with workers who have low literacy and numeracy levels. Tom continues, "We just know that we need to teach them in different ways... We'll explain as opposed to say, 'Go and read the menu.' Or we'll take them over and read it with them... Or help them count things out so they'll know a pile the size of ten. That sort of thing. We get around it.... Then what we find is they adapt it to other things. You show them this is ten, they work through that then after a while they can work out ten apples… They just seem to catch on."

Literacy in the Print Shop

Like the Central Kitchen, prisoners in the Print Shop need a number of skills besides literacy to participate in their jobs. CIE job descriptions state that the Print Shop provides prisoners with safety awareness and time management skills and NZQA unit standards in health and safety, printing, and plastic fabrication. Job descriptions identify worker prerequisites as good communication and listening skills, team work, the ability to use initiative, to work with minimum supervision, to work with other prisoners regardless of their offence, and a willingness to learn. They stipulate workers need basic literacy and numeracy skills and that placement to key positions will occur through industry progression. Quantifying this, Print Shop staff place required literacy at around Year 9 level.

In practice, each job has its own skills and knowledge that workers must master. From my observations, the literacy requirements and practices in the Print Shop vary across the roles. In this sense, literacy is situated or multiple as it reflects the communication and work tasks occurring in each role (Culligan 2005; Roberts 1995). Appendix 8 outlines some of the work tasks and communication activities in the Print Shop.

Workbase Literacy Levels

Literacy in the Print Shop is mainly role specific with texts engaged with in one job often being significantly different from the texts engaged with in other jobs.[29] Table 5 shows the Printing Instructor's estimates of reading, writing, speaking and listening, numeracy, and critical thinking levels in each role using the Workbase descriptor tool. The remainder of this section places these standards in context by describing the social and operational aspects of literacy in this environment.

Table 5. Workbase Literacy levels of jobs in the Print Shop

Level	Description
Reading 5	Work tasks require recognition and interpretation of pictures, symbols, abbreviations, and codes like safety signs or colour codes; recognition of relevant technical vocabulary like equipment names and parts; the ability to read and understand very short texts like notices, labels, dials and gauges and short documents like job specifications, whiteboard notes, memos or notices, or product information; and the ability to read and understand complex work documents, diagrams, tables, or graphics like manuals, policies and procedures, machine specifications, and datasheets. This requires identifying and summarising information; decoding complex ideas; predicting the meaning of unknown words; and knowing the purpose of graphic organisers (like index, contents, glossaries, text boxes) in both short and long texts.
Writing 4	Work tasks include completing simple workplace documentation; describing and recording procedures, problems, or actions in detail; writing short handover notes or reports; and writing longer pieces of text. This involves summarising and ordering ideas logically; communicating information using complete sentences, combing related ideas into paragraphs, and sequencing information appropriately (e.g. by time, date, cause, effect).
Numeracy 5	Work tasks require understanding job-relevant numerical concepts like temperatures, sizes, time, proportions, ratios, decimals, and fractions; accurately observing and recording data or measurements using numbers, words, and appropriate scales/units; and completing a variety of workplace calculations (e.g. addition, subtraction, division, multiplication). This involves both estimation and exact calculation; judging accuracy and recognising error; and troubleshooting and adjusting settings/data/measurements as necessary.
Speaking and Listening 4	Work tasks involve listening to procedures and verbal instructions and responding appropriately; understanding and using technical and industry terms like names and abbreviations for materials, products, and processes; giving factual information and checking for understanding like explaining procedures to others, reporting problems, or seeking help; and structuring verbal communication coherently and logically to communicate information to an audience. This involves identifying audience-appropriate information; planning what needs to be said, using the correct language, tone, volume, and style for the audience; and being understood by listeners.
Critical Thinking 2	Workers are able to independently identify problems (like faults in products) and take appropriate action (like adjusting a machine) in situations that are uncommon or for which there are no procedures. This involves identifying problems, knowing which actions/solutions are possible, evaluating options, and deciding when and how to solve the problem.

Source: Data from Instructor Interview with Workbase literacy level descriptions from Workbase (2006a).

Note: In the Print Shop, literacy is mainly role-specific with texts engaged with one job often being significantly different from the text engaged with in another job. However, while prisoners engage with different texts, the Workbase literacy levels in each of the Print Shop jobs (excluding cleaning) are similar.

The Workbase Literacy Levels in table 5 describe the technical literacy processes involved with work in the Print Shop. In the Print Shop, the differences between each job are immediately apparent. Each job has its own work area, tasks, processes, systems, machinery, and requires different skills, knowledge, and expertise. Each has its own language and working terminology, which may or may not be accessible to other workers in other jobs in the Print Shop (see figures 12-19 for examples the variety of workplace texts in the Print Shop). As Carl, a digital printer says, "Sometimes, when [the offset printers] are talking about something... you just don't understand what they're talking about... It's specific to printing and you are just lost and even though you are involved in it... In the same instance, if I started to talk about different aspects of the digital side, they might get lost." Workplace literacy reflects this and varies in complexity and necessity depending on the role.

In general, literacy tasks in the Print Shop seem to fall into two main areas: literacy that relates to 'what job to do' and literacy that relates to 'how to do the job'. Both these areas are encompassed in Hull's (2000) notion of 'literacy for doing'.* The first – the literacy required to understand what job to do – usually includes reading, speaking, and listening to identifying job details like numbers and materials. This might involve looking at job bags, order forms, e-mails, participating in a mini production meeting, or talking with the Instructor. The information gained from these communications is often technical and varies depending on the nature of the job (see figure 19). This means job details must be read or communicated, are always new, and unlike the standard menu in the Central Kitchen, cannot be memorised. The communication medium, as Business Manager, Marcus says, is different for different jobs:

> The computer guys will get the piece of paper with the order on it and the disk. The guy on the offset printing will be given a plate, so it's just a matter of interpreting the plate and running off x amount of product. The guy in the plastics will probably be given a verbal. The plate maker would be given the material all ready to go so he just needs to set up the plates and develop the film... [The store and dispatch] would get all written instructions, as to what address they need to send a product to... [The bindery] get told what they need to do, 'There's fifty five thousand folders. Just pack them up and get them into boxes'.

The second – the literacy required in doing the job – usually includes reading, writing, speaking, number work, and problem solving used in the production

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* See chapter 3 and note 5.

process. This tends to be more practically orientated and involves reading gauges and equipment, understanding colour, and using technical language. Tasks often require a degree of collaborative or individual problem solving and numeracy. Calculations are usually exact and estimates are rare. Literacy is job-specific, relates to the machine or equipment being used, and is often learned on the job. Depending on the role, low levels of functional literacy (reading, writing, maths) do not necessarily prevent someone from participating in workplace tasks. "I mean, once they get into the workshop their level of literacy or skill dictates what they end up doing anyway," says Business Manager, Marcus. He explains, "If you can't read and write you don't want to go and work on the computer because you can't do anything... [but]... in the plastics where they have one really good strong guy that can set the machines up for them and all they have to do is sit there and punch... paper out or cut paper, or they've got a frame where they just punch out cardboard to go inside the folders."

The distinction between the literacy involved in what job to do and how to do it is illustrated in Printing Instructor, Kevin's example of the importance of numeracy in the printing industry, "One of the printers I had on the two-colour, he was quite a good printer, but his reading and numeracy was very limited… which held him back really because you could say, right, I want you to print two thousand of these sheets, and if it were a big stack of paper, he'd pick it up and print the lot, cause he didn't know."

An interesting paradox exists in the workplace regarding the necessity of literacy. On the one hand, literacy skills are seen as very important across the board. For Printing Instructor, Kevin, "It's a common denominator in everything really." The importance of literacy in the job is logical because, as Business Manager, Marcus asks in chapter 3, how do you know what is required, what to do, or how to do it if you cannot read and write? Likewise, prisoners see literacy as central to success. "If you didn't have any level of it, you wouldn't last very long. You wouldn't fit in. You'd get one of the bum jobs," says Rob.

On the other hand, literacy skills are not an absolute prerequisite for working in the Print Shop. Staff are more focused on appointing prisoners who want to work. "It's more practical. If you are practical you'll be okay; you don't have to have literacy skills," says Instructor, Kevin. "They have enough already." While Business Manager, Marcus says, "To survive in the Print Shop you've got to have a reasonable amount of literacy... or a reasonable amount of ... umm... Just because you go to the Print Shop doesn't necessarily mean you have to have a high level of reading and writing. You just need to have a good work ethic." Similarly, different perspectives on the necessity of literacy in the workplace were illustrated in the Print Shop focus group. Throughout the

interview prisoners commented on the importance of literacy, and especially numeracy in their work; but also gave an example of how they deciphered the meaning of machine instruction manuals written in industrial German from pictures and diagrams.

It is hard to isolate the cause of this paradox. It may be, as Kevin says, the majority of prisoners who enter the Print Shop simply have enough literacy already for most jobs; with the industry having the resources to accommodate prisoners with lower literacy levels in more methodical and process-driven positions. "So they are not limited by their abilities, they are only limited by what jobs are available," says Business Manager, Marcus. It may also be that prisoners with lower literacy levels have developed a number of coping mechanisms that allow them to operate in the workplace (Workbase 2006b). Alternatively, a type of "scaffolding" where learners are able to perform at higher levels with the assistance of teachers or peers (Culligan 2005), may be operating in the environment. It may also be that participants overvalue the role of literacy in their work. While some researchers propose that people undervalue the literacy aspects of work tasks (Comrie and Culligan 2006), it may be that literacy is not as essential in work tasks as people assume. Rather, the positive connotations associated with literacy in much of the literature and in government policy, frames literacy as a standard requirement for participation in everyday activities and this position is reflected in people's assessment of the importance of literacy.[30]

Although plausible, these theories are problematic as following them to their conclusions involves disregarding participants' experiences as naive or misguided. From my experience, a degree of literacy was required in most jobs and most prisoners seemed to have enough literacy to participate in industry, but those with lower literacy levels were also able to participate. Likewise, reasonable literacy and work skills are seen as necessary to work in comparable industries outside; yet the Print Shop completed similar work, even with prisoners with lower literacy levels, while still being run like most small-scale print businesses.

Looking at the environment more closely helps reconcile these initially contradictory views. A distinguishing element of the environment is that it provides vocational training for prisoners. The difference is summed up by prisoner and qualified printer Reuben, who says of his experience of the print industry outside, "There is provisions for learning, but the people who are employing staff look for the best quality staff. And they are trying to do things more so to a time limit, time frame, and the quality of work is generally better than what we would produce as a whole in here… And not putting anyone's work load down… but we are dealing with professionals on

the outside in their trade. Whereas in here… people who have put through a job where they've probably had no experience. So it takes time to get there."

The CIE philosophy of providing work experience and training means the main focus in the Print Shop is teaching and learning by doing. Part of the role of staff is to provide a learning environment that encourages engagement. Thus, there is more leeway and acceptance for non-traditional learning styles and non-standard communication practices. As Printing Instructor, Kevin says:

> The difference outside is you get young guys coming in because they want to work in the printing industry… Whereas these guys have come to prison… But as soon as these guys start, and start to enjoy it… and they get their first certificate with their name on it, they're usually, 'That's it, I'm away'. Most of these guys are used to failing. They've never seen their name on a certificate before… You can see the effect it has on them. They really go for it then… And that's what we're here for. Basically that's what we're here for. To try and get them work when they leave so they have more esteem about their self.

Understanding the Print Shop's environment provides insight into the multiple levels of literacy that operate there. While there is no doubt in the participants' minds that things are easier with literacy skills, there is also recognition of alternate ways of completing tasks. Literacy is therefore central to the industry, but can be worked around, and prisoners with varying levels of workplace literacy can participate in workplace activities.

Literacy for the Industry

As mentioned earlier, the literacy required to participate in the industry can be taken as the literacy required for achieving the qualifications offered by relevant ITOs. This is because, given the employment barriers of being an ex-prisoner, access to the industry is improved with relevant qualifications (Harrison and Schehr 2004).[31] In both the Central Kitchen and the Print Shop there is a view that qualifications generally show an employer that a person has applied themselves and is willing to learn. They also quantify a person's industry expertise. However, staff and prisoners also recognise the importance of other attributes like work ethic and in some cases practical aptitude, which are not necessarily tested by qualifications.

In the Central Kitchen, the first priority is to feed the prisoners. Qualifications and training fit around this. For staff, there is no question that higher levels of literacy are needed to complete qualifications than to participate in work. As Business Manager, John explains, "You just need to do it for the qualifications. Cause the way the kitchen's structured with the menus and whatever... They know right, I've got to get up at six

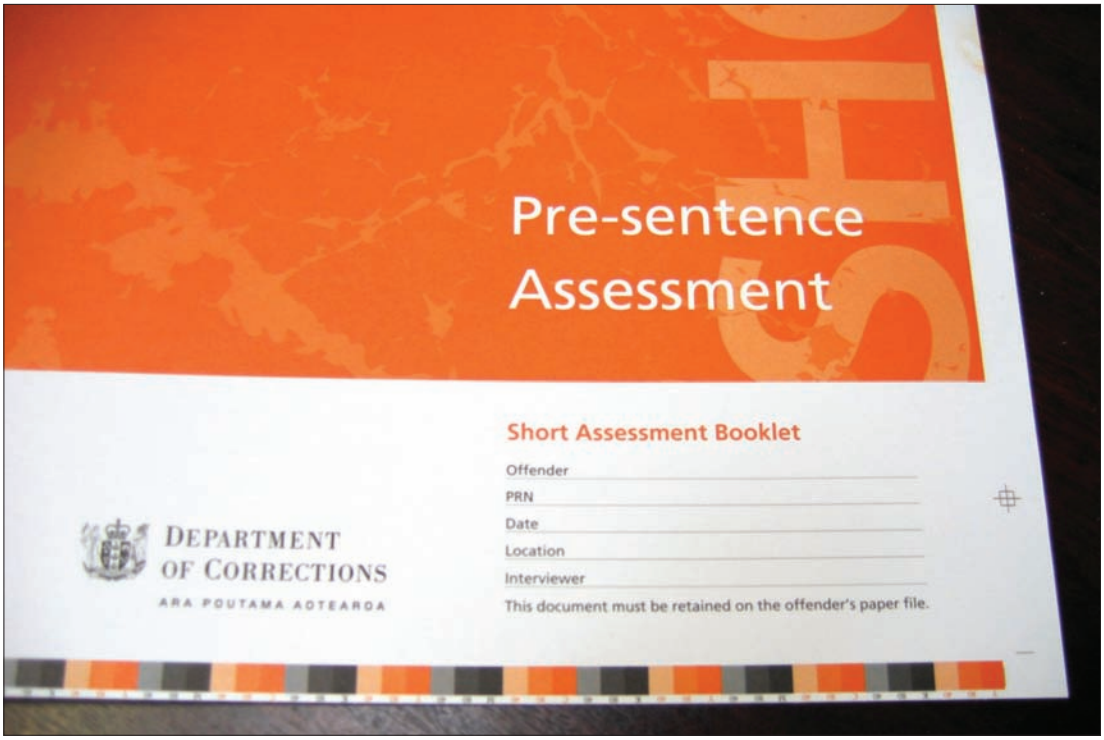

Figure 12. A cover for a Pre-sentence Assessment book with printing markings still attached. These markings are like a language that tells printers about the document and its make up. The cross and line in the lower right-hand margin are used by the offset printer to ensure each colour is being printed in the correct place and images are aligned. The colour bar at the bottom is like a code that tells the offset printer about the composite colours used in printing the document. These printing markings are trimmed off before the booklet is sent out.

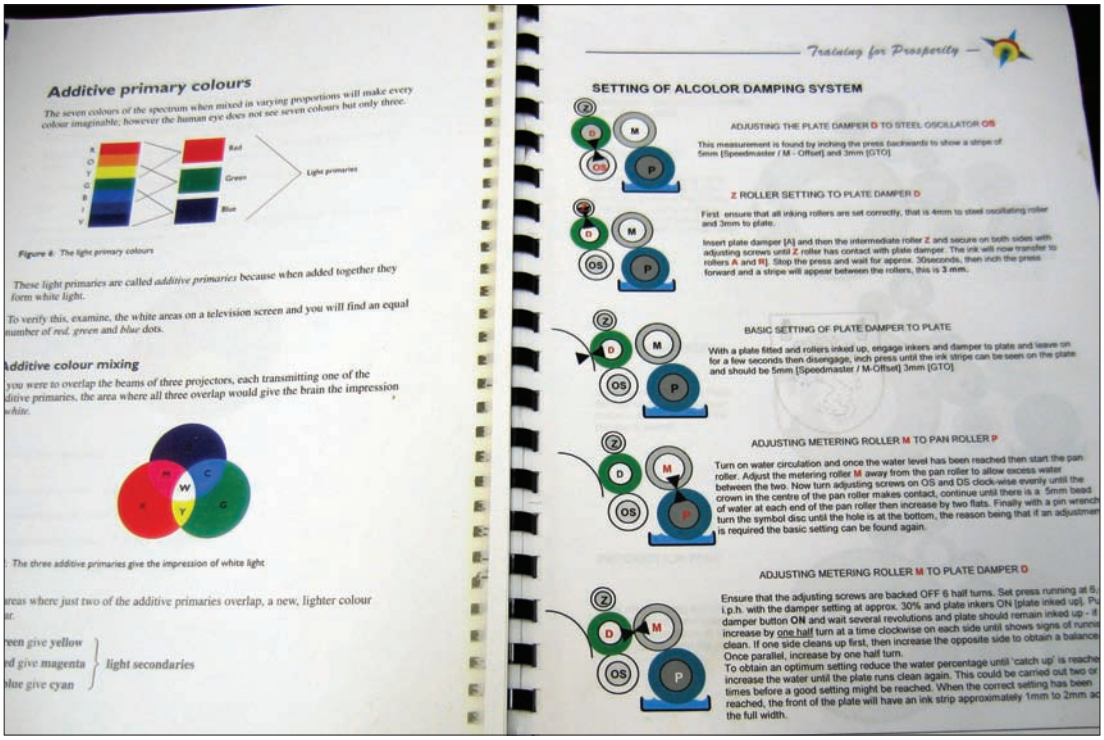

Figure 13. Pages from two A4 spiral-bound offset printing instruction manuals explain additive primary colours and colour mixing (left) and alcolor damping systems settings (right). Printers need to know the physics and chemistry of colour production and how the mechanical systems of their presses operate. The illustrated text explains the processes simply, but in technical terms, using jargon.

Figure 14. A Pantone colour chart on the wall in the Print Shop. The colours and numbers displayed on the chart illustrate the internationally standardised Pantone tones system. Pantones are used by printers to determine if the colour they are printing aligns with the colour specified by designers. Printers have to be able to match colours to the international standards, know what different saturations of the colour look like (e.g. 30 % Pantone 541), know how the colours mix together, and know how an ink will dry to produce the correct shade.

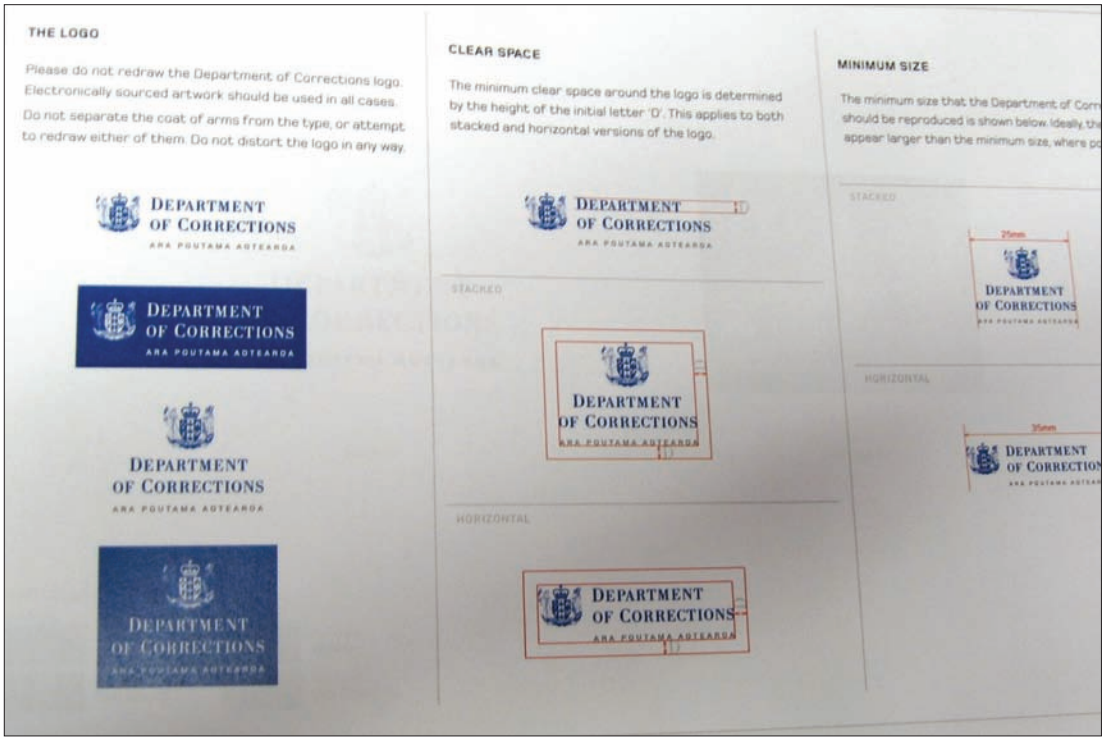

Figure 15. Style guide page illustrating layout for Corrections' logo in the office at the Print Shop. Digital printers or plate makers using the logo need to ensure it is laid-out in this way. Specifications include the use, colour, placement, words, font, format, and size of the logo in various documents and communication mediums.

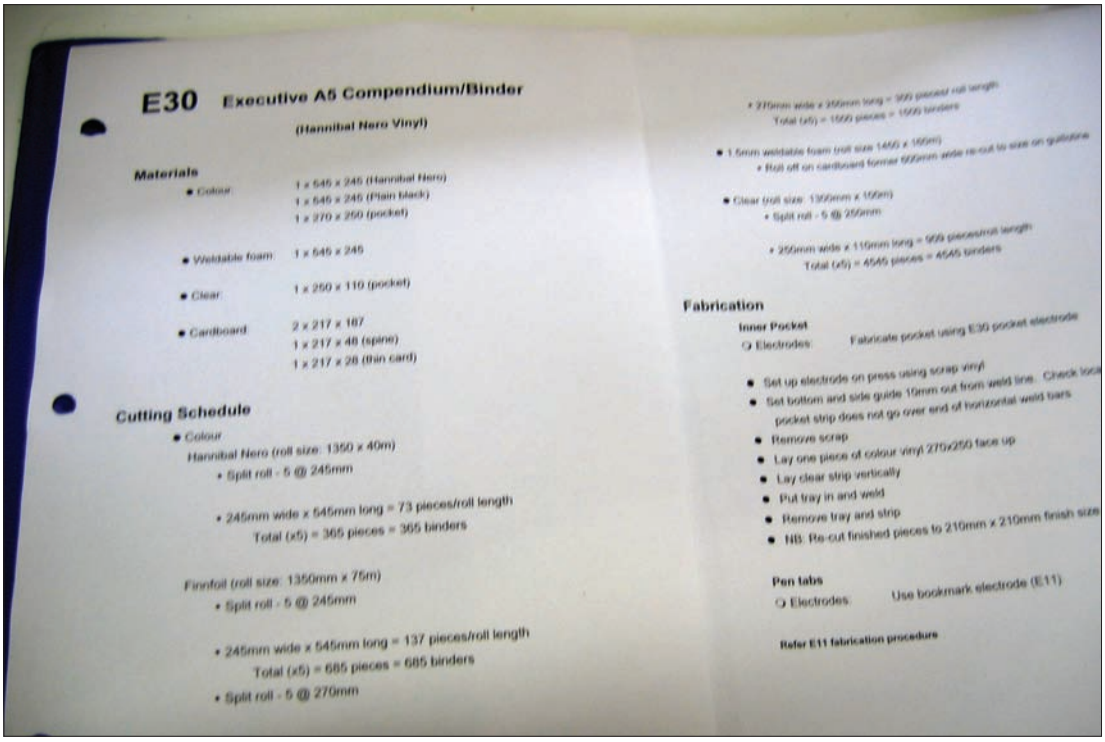

Figure 16. Instructions for making an Executive A5 Compendium. The manual, including design diagrams, was compiled by a prisoner in the plastics section of the Print Shop. It outlines the raw materials (e.g. PVC, cardboard, foam, metal D rings, rivets), equipment, settings, and processes required to cut out, weld, emboss, and assemble the ring binder.

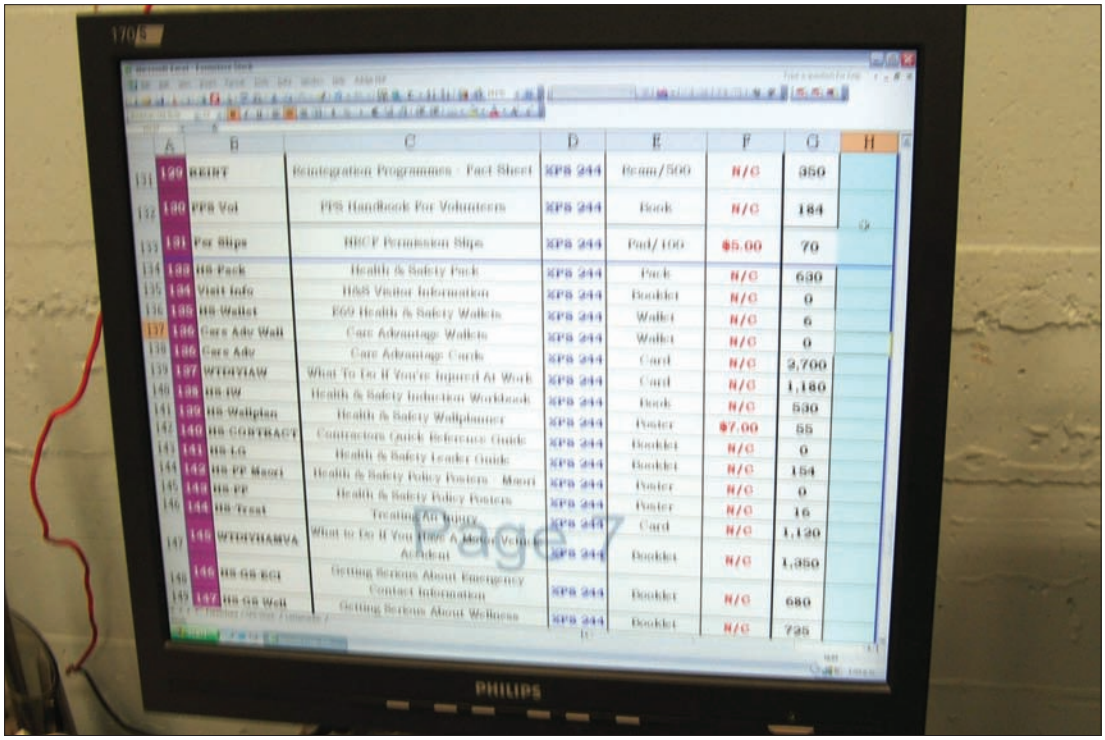

Figure 17. One screen of the computer-based stock list, ordering, and invoice system used in the Print Shop. Dispatch workers record orders using a specialised printing invoicing system. They also record and manage stock using a computer database. Each product is recorded by name, numerical code, and text description. Quantities, prices, and other product information can also be recorded.

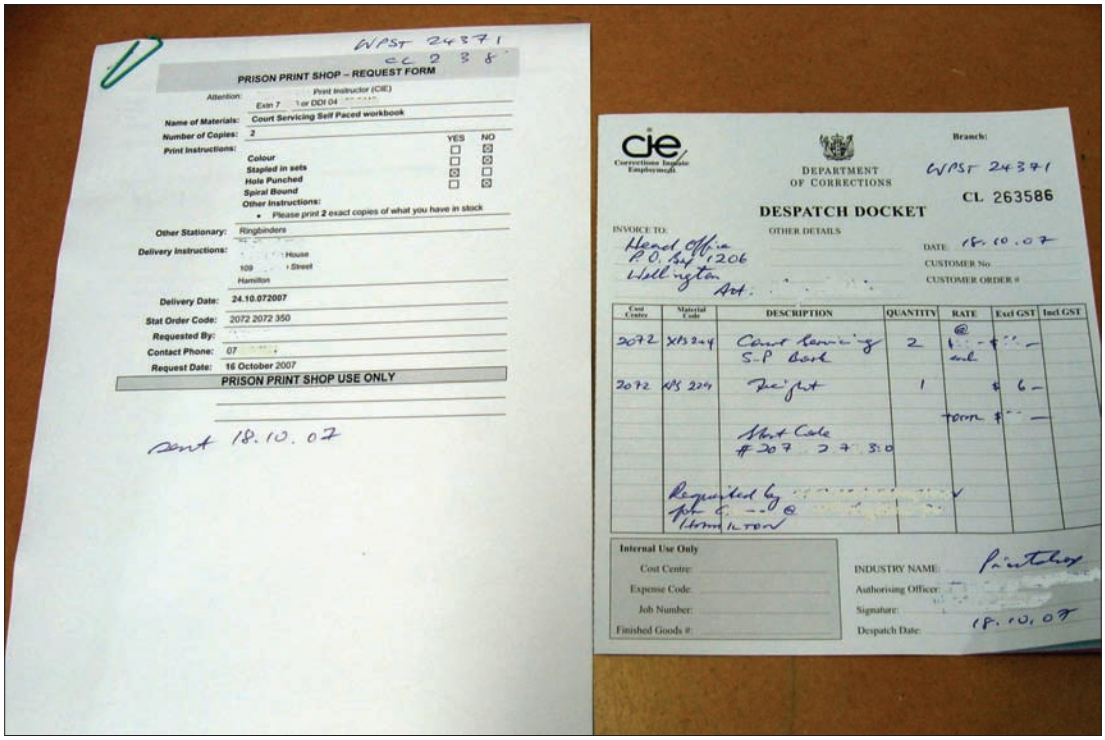

Figure 18. Two common Print Shop documents: A request form (left) and a dispatch docket (right) for an order for Departmental workbooks. The Print Shop Instructor generally fills out a job bag from information on the request form. For this order, Printers would print the order from existing plates before sending to bindery for assembly. Dispatch would then check the order against the docket and request before parcelling up, addressing, posting, and preparing an invoice. Information about the job would be transferred using written and verbal communication.

Figure 19. Labelled cardboard folders store metal printing plates from previous jobs in a storage system in the Print Shop. Each folder may contain a number of shiny metal plates. Each plate contains image and non-image surfaces (smooth or rougher areas), which correspond to images/text and blank space on the finished printed material. On receiving a written or verbal order for a repeat job, the plate maker will use plates as they are. For new jobs, the plates may be referenced and new plates made.

because we've got to cook. We've got to start the tray line at quarter past six. We've got to put out nine hundred meals. So I get my head down, arse up and I work. And that's a work ethic... You don't need an education to do that."

From my fieldwork, I would argue that the qualifications offered in the Central Kitchen test more advanced competencies than those needed to work there. They are industry-approved NZQA qualifications and test for the competencies required in any catering business and not just a highly standardised industrial kitchen. As John says, "To learn to do training or whatever is to up the stakes. They've got to have full literacy because caterers do that.... You've got to follow recipes. You've got to be able to read and write. You've got to know how to weigh out things … You can't work around it. You've got to know. You've got to be able to know how to tell the time. You've got to know ..., how to work the controls on the oven."

In the Print Shop, the literacy required to achieve qualifications is mostly the same as the literacy used in everyday work tasks. According to Printing Instructor, Kevin, first and foremost, the Print Shop is there to provide prisoners with work experience and training, "It's a fine line between teaching and meeting deadlines... Our primary role is to teach them NZQA qualifications so they have skills when they leave, to join the work force." The business' regular clients generally provide enough material through their everyday orders to meet training requirements. He adds, "The more work we get, the more training done really."

It is unclear what literacy levels are required to achieve qualifications in both the Central Kitchen and the Print Shop. However research commissioned by NZQA (Boss and Roxborogh 1996) into competency-based qualifications in four manufacturing industries found that literacy, language, and numeracy competencies are required to gain entry-level NZQA qualifications. It also found a large number of candidates did not have the skills in these areas to undertake training or achieve qualifications. It is likely that recent proposals to increase the amount of literacy and numeracy assessment in national vocational training and assessment (Tertiary Education Commission 2008) will further increase the literacy, numeracy, and language competencies that learners need to achieve NZQA qualifications.

My fieldwork in the Central Kitchen and the Print Shop suggests that prisoners in the Central Kitchen are achieving lower-level NZQA qualifications than prisoners in the Print Shop (see table 6 for the number of unit standards received by prisoners in the 06/07 financial year). This does not necessarily mean that prisoners do not complete qualifications because they have low literacy levels or that prisoners in the Central Kitchen have lower literacy levels than prisoners in the Print Shop, although both may be true. Prisoners may not complete qualifications for a number of reasons besides literacy

barriers. These include transfers, release, or non-interest in the qualification. In addition, the Print Shop often targets prisoners with longer sentences because of the length of time (up to nine years) it takes to master the printing trade. This means they are able to provide prisoners with higher-level qualifications that take longer to achieve. More research would be needed to determine the strength of this association and its causes.[32]

Table 6. Number of NZQA Unit Standards delivered in the Central Kitchen and Print Shop between July 2007 and April 2008

Unit Standards	Central Kitchen		Print Shop	
	Number	%	Number	%
< Level 1	27	53	...	...
Level 1	18	35	...	...
Level 2	6	12	8	57
Level 3	...	...	6	43
Total	51	100	14	100

Source: Unpublished data from the Department of Corrections.

Note: In this instance, the number of prisoners receiving unit standards between July 2007 and April 2008 are the same as the number of unit standards delivered.

CHAPTER 10
Understanding Literacy in Corrections Inmate Employment

Don hands me a small black card with a white ribbon pinned to its front. White ribbon day's coming up, he says. We print the stock and the guys in the wings attach the ribbons. Its therapeutic giving something back, he says. We are part of the problem, but we also need to be part of the solution.

Don, prisoner, Print Shop

Over the last two years, I have explored literacy in CIE. This has involved investigating literacy in two Wellington-based CIE industries, the context in which they operate, and the wider relationship between literacy and employment in New Zealand. The aim was to provide an understanding of literacy in CIE; an understanding that could assist in providing more effective participation in CIE training. This chapter draws my findings together and summarises what I have learned about literacy in CIE.

Paradigms and Policies

One feature of qualitative approaches is the focus on the relationship between social phenomena and context (Liamputtong and Ezzy 2005).* Applying this rationale, literacy in the Central Kitchen and the Print Shop is influenced by the environment in which it operates.

An important influence on literacy in CIE, which is reflected in the policies of the Department of Corrections, is the relationships between literacy, education, work, and re-offending in correctional literature. In correctional paradigms, research usually focuses on quantifying prisoner literacy and establishing a literacy-profile of prisoners or on recidivism and reducing re-offending. Internationally, 14-20 percent more prisoners than householders have literacy levels below IALS Level 3 (Morgan and Kett 2003; NCES 1994). If a similar margin were applied in New Zealand, around 55-60 percent of prisoners would have literacy

* Authors referenced in this thesis who would adopt the idea that the social, economic, and political environment impact on phenomena would include Agar 1996; Atkinson and Delamont 2005; Baert 2005; Barrett 1996; Belfiore et al. 2004; Berreman 1968; Cahoone 1996; Chase 2005; Denzin and Lincoln 2005; Foltz and Griffin 1996; Fox 1991; Geertz 1973; Liamputtong and Ezzy 2005; Marcus and Fischer 1986; McGee and Warms 2000; Meloy 2002; Neumann 1996; New London Group 1996; Rainbird et al. 2004; Richardson and Adams St. Pierre 2005; Schultz and Lavenda 2005; Spradely 1979; Stake 2005; Trouillot 1991; Weick 1995; Wolcott 1994.

levels below those that the OECD (1997, 2000) considers are necessary to cope with everyday life in a knowledge society.

This is problematic for the New Zealand Department of Corrections because correctional literature shows that improved literacy aids rehabilitation and reintegration by assisting with cognitive development and providing prisoners with life skills that allow them to participate and live more easily in the community (Caddick and Webster 1998; Morgan and Kett 2003). Although literacy does not cause change in itself, it is related to education and employment (OECD 2001; Roberts 1995) and both these things have been shown to help offenders avoid recidivism (Adams et al. 1994; Batiuk et al. 2005; Harrison and Schehr 2004; Heinrich 2000; Smith and Silverman 1994; Uggen 1999).

In line with this, the Department of Corrections is strongly focused on increasing the range, quality, and relevance of education, training, work experience, and recognised qualifications available to prisoners (Department of Corrections 2006b; Von Dadelszen 2006a, 2006b). Employment training programmes and literacy and numeracy education are central elements of this. The Department of Corrections relies on work done by government education and labour agencies in developing its own education and training programmes (Von Dadelszen 2006a, 2006b). Thus, understanding of the relationships between literacy, education, and labour in education paradigms and in the government education and labour sectors also influences literacy in CIE. These policies frame literacy and numeracy as a foundation for participation in family life, society, skilled employment, and lifelong learning in a knowledge economy (Ministry of Education 2006b).

From Policy to Practice and Back

CIE is one mechanism the Department of Corrections employs to deliver high quality education and qualifications that are valued by employers (Department of Corrections 2006b; Von Dadelszen 2006a, 2006b). Each day, nearly 2,000 prisoners go to work in farming, forestry, timber, horticulture, catering, laundry, manufacturing, construction, printing, tailoring, and engineering businesses. Between July 2007 and June 2008 they will work for more than three million hours and receive over ten thousand ITO-approved NZQA unit standards.

Across the 140 CIE businesses that these prisoners work in, there is a degree of similarity in the way training is provided and a degree of difference in the content of the subjects being taught. Literacy in each environment is influenced by each business' work, processes and systems, technology, and physical environment and by the structures and interactions present in CIE.

The absence of this degree of standardisation in the Print Shop makes it more difficult to summarise literacy across this industry. In the Print Shop, literacy is mainly role-specific with the text engaged with in one role being often significantly different from the text engaged with in another role. Workplace literacy and numeracy in the Print Shop are often technical and vary depending on the nature of the role. Information on 'what job to do' is usually new and cannot be memorised. In contrast, the literacy and numeracy involved in the production process itself is often exact and detailed and depends on the machine or equipment being used. In addition, it is practically orientated and can be memorised.

In both industries, low literacy levels do not prevent workers from participating in CIE. In the Central Kitchen this is because the strong work processes reduce reliance on literacy and numeracy. In the Print Shop, acceptance of non-traditional (or non-school based) learning styles, alternative literacies, and a focus on learning-by-doing seem to allow prisoners access to the workplace, regardless of their literacy and numeracy abilities. Likewise, the fluidity of prisoners' individual and collective identities in both workplaces and the impact of this on reporting lines, communication, and deliverables mean literacy in CIE is often simple, basic, and necessary.

Considering literacy in CIE without reference to ideas like motivation, human potential, and social capital is difficult. From my observations, it seems literacy is closely tied to education and learning in the minds of participants. In turn, being literate is associated with opportunity, access, and choice. Literacy capability is measured against an ability to understand and create meaning in situations relevant and important to the individual.

Likewise, a number of factors motivate prisoners to engage in training; from filling up time, to the tangible opportunity they can see the training offers them. Prisoners do not participate simply because they are told work is a reintegrative initiative that allows them to address their offending behaviour. From my observations, decisions about where to work depend on a prisoner's perceptions of the immediate or future benefits of each job. The success of the training itself depends on whether the programme is flexible enough to operate in a prison environment; whether it provides opportunities for learning (including access to specialised support services like literacy programmes); and whether it engages prisoners in learning.

Similarly, engagement in literacy in these CIE workplaces depends on whether it is safe or suitable to participate in workplace literacy activities; whether there is an opportunity to participate (including access to specialised support services like literacy

programmes); and whether prisoners are interested or see benefits in participating. These things are influenced by each prisoner's characteristics, world view, and background; their views and understandings of literacy and CIE; each workplace's physical, institutional, and organisational environment; and the social, cultural, political, and economic context in which the Department of Corrections operates.

My fieldwork shows that participants at both sites associate literacy with knowledge and knowing. While the value of practical knowledge is recognised by staff and prisoners alike, the importance of backing up this knowledge with qualifications is also recognised, especially in relation to gaining employment. It is unclear what literacy levels are required to achieve qualifications in each industry; however, national research indicates that literacy, language, and numeracy competencies are required to gain entry level NZQA qualifications (Boss and Roxborogh 1996). Prisoners in the Central Kitchen seem to be achieving lower-level NZQA qualifications than prisoners in the Print Shop; however, the strength of this association and its causes are unclear.

My fieldwork suggests that embedded literacy programmes provide better access to literacy support than stand-alone programmes. This aligns with recent Government strategy, which identifies embedded literacy as best practice (Tertiary Education Commission 2008). This insight is timely as the Department of Corrections currently has the opportunity – through the review of its literacy programmes (Department of Corrections 2007c) – to incorporate literacy and numeracy training into CIE. The Department of Corrections would then be prepared for the impact of current plans to increase the amount of literacy, language, and numeracy assessment embedded in vocational training qualifications (Tertiary Education Commission 2008). It also has the potential to make employment training more effective and contribute towards CIE outcomes by providing prisoners' with access to literacy support in situations where the need for support is often immediate and the benefits of the support are clearly visible.

The conclusions of this research have arisen from information collected during site visits, participant observation, interviews, and focus groups, and from existing research, policies, and strategies. They draw together my observations as researcher and participants' perspectives on literacy in CIE; they explore connections between the literacy, local situations, and meaning, and discuss findings in relation to existing literature and research. In this way, observation is supplemented by theory, and theory is explored in a real-world context.

Looking at 'literacy in use' (Belfiore et al. 2004) moves understandings of literacy from the theoretical understandings outlined at the start of chapter 3 towards a

more holistic understanding of literacy. Combining the literacy continuum with purpose and practice shows that a functional understanding of literacy acts as a type of shorthand for the variety of ways individuals use literacy to understand and create meaning in the workplace. The complex and flexible ways literacy is understood in CIE reflects the findings of recent research (Sligo et al. 2005) into literacy in Wanganui. Sligo et al. (2005) propose that the concept of literacy should be viewed in terms of the three intersecting spheres of functional skills (or the mechanics of a person's literacy), the whole person (and their attributes), and the person's life world. Where figure 2 allows distinction between the theoretical elements of literacy, applying the 'midrange model of adult literacy' (Sligo et al. 2005) allows understanding of the relationships between the various elements of literacy in the context of CIE.

The strength of understanding of literacy in this way is that it places the person at the centre of discussions about literacy. Similarly, my research suggests, that for training to be most effective – both in providing the base for meaningful employment and lifelong learning – the prisoner needs to be placed at the centre of the discussion. Employment training needs to be offered in areas in which prisoners are interested, in tandem with support services like literacy and numeracy assistance. Meshing together opportunity and support can provide the mechanism for prisoners to become part of their own solutions.

APPENDIX 1
Developing Methodological Premises

There is ongoing debate in the social sciences about research, which is about, not *by* and *for*, participants (see Rudge 1993). Central to this is the concern research creates (or fails to resolve) power imbalances: that participants should determine the need for research, its form and outcomes, and the terms of their participation (Rudge 1993). Central to this is an entrenched division between researchers and participants: that research, by its very nature, creates self and other identities and these "borders are always with us and *within* us" (Neumann 1996, 195). Central to this is the nature and application of ethical research. This appendix discusses what ethical research might look like and how it might be applied. First, it develops an ontological premise, which addresses these divisions between self and other. It then it develops a methodology based on mutuality and action. The outcomes of this discussion form the methodological premises that underpin this research. Appendix 2 discusses how methods employed in this research were selected to align with this ontology and methodology, and appendix 3 specifies the research methods employed.

Developing an Ontology: Addressing the Division between Self and Other

A dualistic distinction between self and other is evident in anthropology's academic history. In traditional ethnography, a kind of realism developed as researchers tried to represent particular ways of life as fully as possible (Marcus and Fischer 1986). The author's 'natural' voice was privileged as fact over the authority of his or her own subjective and personal experiences and those of their participants. In the 1950s, social borders began to shift and local others replaced exotic others as the subjects of research (Neumann 1996). More recently, the boundary between self and other was further blurred in what Marcus and Fischer (1986) termed the 'crisis of representation'. The crisis, which can be traced back to the 1960s, arose from "uncertainty about adequate means of describing social reality" (6). Here, postconditioners* began discussing the

* Marcus and Fischer's term (1986) for postmodern, postcolonial, and post traditional researchers.

implications of acknowledging the impossibility of objectivity (Cahoone 1996; Foltz and Griffin 1996; Marcus and Fischer 1986). Critiquing traditional approaches, they began looking for more reflexive research methodologies in order to recognise and illustrate how knowledge is co-constructed by researchers, participants, audiences, institutions, and communities; how it is mediated by self, context, time, and even scholarly production norms; and the power implications of this (Cahoone 1996; Denzin and Lincoln 2005; Foltz and Griffin 1996; Fox 1991).

However, discussion of self/other distinctions alone does not make anthropology more ethical. Fox (1991, 15), for example, argues anthropology needs to be recaptured from the "condescending veneration" of postmodernism. This goes beyond adoption of reflexive, polyphonic, or dialectic devices (Fox 1991) or critiquing anthropology for the flawed construction of others (Trouillot 1991). Rather, as Trouillot (1991) argues the reflexive lens needs to be turned on the discipline's underlying premises. Anthropology did not create the other, but was created because of the other. In the sixteenth and seventeenth centuries, the world began to open up and expose Europeans to the other, the savage, or the native. This idea of the savage, combined with Western philosophy and utopian thinking, simultaneously created Europe and Otherness and the concept of the West. "The West's vision of order implied from its inception two complementary spaces, the here and the elsewhere, which premised one another and were conceived inseparable" (Trouillot 1991, 32). Trouillot (1991) argues anthropology needs to address the thematic field – the larger world – which makes the 'savage slot' possible instead of trying to reconcile the self and other by examining internal tropes.

The work of philosopher John MacMurray can be seen as an attempt to do this. MacMurray (1929, 1950, 1961, 1962, 1968) identifies two schemas of the self, the mechanical and organic, in modern philosophy. In short, he argues modern philosophy's problems arise from inadequate conceptions of the self and the resulting knowledge of the social world is both limited and limiting. A new, more inclusive schema is required to provide adequate understanding of the nature of the self, its realisation, and the social world.

The mechanical schema (MacMurray 1961), predominately used in the sixteenth to eighteenth centuries, is based on Descartes' principle that thinking confirms existence because it cannot be separated from existence – 'I think therefore I am'. Defining the self as a thinker has two implications. First, it establishes the self as a substance because it "root[s]... thought in existence" (1929, 165).[33] Second, it abstracts the self and knowledge because it makes each individual person a spectator (or subject) to their own

ideas and other people an object of their thoughts. In addition, the person as thinker is simultaneously an object for their own and other peoples' thoughts. MacMurray (1961) concludes modern philosophy only allows people and events to exist in the abstract, that is, as objects or images of thought. This has important implications for knowledge because as MacMurray (1961) says "All possible objects of knowledge have become equally images… Any distinction between true and false ideas becomes impossible" (16-17). According to the mechanical schema, people are "abstract identical units… their value… depends not on their intrinsic differences (for none are allowed), but upon their position" (167).

The organic schema (MacMurray 1929) gained prominence between the late eighteenth and early twentieth century as philosophers applied biological theories to the social world.[34] The organic schema attempted to acknowledge that people are not just matter but part of an interdependent and interlinked social system. People are not only structural (ie mechanical) but also functional; the self is a living being as well as a substance (MacMurray 1929, 1961). The underlying premise of the organic schema is that each person exists to perform a unique function that supports social life and supporting existence becomes each person's only end.

MacMurray (1929, 1968) argues that mechanical and organic schemas provide a limited understanding of the social world. The theoretical logic of the mechanical disallows comprehension of the differences between people. Any attempt to reflect on difference leads to subjectification and objectification of researchers and participants. In addition, information generated has limited meaning because of its abstract nature; it is "knowledge *about* things, not *of* them" (1962, 43). The theoretical logic of the organic approach builds upon the problematic subject/object categories of being of the mechanical schema. In addition, the organic schema's categorisation of people by their social role dehumanises the self further by limiting its identity to a function of the social world. Its dual emphasis on difference of function and a common goal "deprives the individual… of their uniqueness. They are essentially complementary, each relative to all others" (1929, 172). People are valueless because they have no unique personal value or identity outside their social function. "The baker bakes that the spinner may spin. The spinner spins that the baker may bake. We are swallowed up in an endless and meaningless relativity" (175).

In contrast, MacMurray (1929, 1961, 1968) believes the most important thing about a person is that they are a person, not their place in the social structure or their social function. He believes a new, more inclusive schema is required to provide

adequate understanding of the nature of the self and its self-realisation. His alternative framework – the personal schema – begins with an action-centred ontology based on the concept of *persons in relation* or *mutuality* (1950, 1961, 1962, 1968).

MacMurray (1961, 1968) theorises existence is known by participating in it with knowledge being gained as the self modifies and experiences the world. Knowledge about reality is gained through interaction with the social world and the people who exist in dynamic relation to it (1961, 1962). At the personal level "people are constituted by their mutual relation to one another" (1961, 24). An isolated person is logically impossible because the self ('I') exists and is defined through its relation to another person ('you'). This relation can be personal (I-you) where the other person is identified as integral to the self or impersonal (I-it) where they are identified as an object separate from the self (1962). Although differences between people exist, true personal relationships (or friendships) involve the active, conscious, and mutual engagement of both parties, are based on equality and freedom, and override all functional distinctions between people like race, class, gender, or culture (1961, 1962).[35] Personal relationships enable knowledge *of* reality as the understanding they generate is based upon real engagement or experience of the world.[36] It should be noted, that the functional is extremely important as peoples' identities and experiences shape their realities and worldviews. However, it is the fact they are people that is most important.

MacMurray's personal schema (1929, 1968) allows knowledge of the social world without dehumanisation.[37] Adopting the standpoint of an 'agent' and a personal worldview the self is not excluded or abstracted from existence but is simultaneously an agent and subject. The other is simply the negative aspect of the self and provides the resistance and support it needs to be defined. In the personal schema the object/subject categories of being created by the modern philosophical standpoint are avoided (1961). "A togetherness of self and other" (1961, 209) is established because there is "no longer any need to isolate the two aspects of unity and difference in an antinomy of sheer identity and sheer difference" (27). In this way, there is no fragmentation between the functional and the personal, the self and the other. Rather, as discussed below, there are multiple ways of interacting, accessing, investigating, and representing social phenomena, with gained knowledge being less or more complete depending on the methods used.

Developing a Methodology: Towards Action and Mutuality

MacMurray (1961, 1968) discuses three forms of enquiry or reflexive activity that

can be used to provide understanding of the social world. These are the mathematical or scientific; the artistic; and the religious, philosophical, or personal (1961, 1968). Both scientific and artistic forms of enquiry investigate functional aspects of social life. However, although they provide valuable information about the social world, they are incomplete or abstracted as they only refer to one aspect of experience. Scientific enquiry investigates the actual, that is, how things work or behave. It uses reality as datum for establishing facts and by observing, comparing, generalising, and recording, and it categorises information as 'true' or 'false'. Scientific knowledge reflects on the world as a 'means to an end' because it looks to explain how the situation is arrived at. Artistic enquiry (1961, 1968) investigates the possible, that is, it works to ascertain what observed form might mean. It uses reality as a model and by exploring, manipulating, contemplating, particularising, and evaluating it provides descriptions of it that are valued as 'satisfactory' or 'unsatisfactory'. Artistic knowledge reflects on the world as 'an end' because it looks to communicate the feeling and emotion of the situation. Both scientific and artistic enquiry can be ethical or unethical because they separate the means of investigation from its end or product. Something can be proved true or satisfactorily represented and be unethical because of the way it was proven or observed.

In contrast, personal enquiry (MacMurray 1961, 1968) investigates dynamic relations with the other. In this type of enquiry, understanding is gained through personal experience not simply through reflection or abstraction of the experience. Personal enquiry integrates artistic and scientific methods to provide knowledge of a personal other in mutual relation to the researcher. This necessarily involves the investigation of both the actual and possible, of matter and emotion. Personal knowledge (or 'knowledge proper') is thus a 'unity of action' because it is a complete investigation of the social world. It is also an intrinsically ethical form of enquiry because, by definition, it would not be personal if the process or outcome were not mutually good for the researcher, participants, and community.

Expanding on MacMurray (1929, 1950, 1961, 1962, 1968), many forms of personal enquiry are possible. The key elements are that the research is conducted from the standpoint of action and guided by mutuality. Research from action necessitates that the researcher gains knowledge of the phenomena through practical experience or interaction with them. This may involve emersion in an environment, participation in social events, development of relationships with participants, conversations or interviews, and so forth. Research in mutuality requires every part of the research to be conducted in mutuality. This requires attention to material, organic, and personal aspects of the social world

as all of these define and shape experience. It means commitment to understanding each other's perspectives and humanity in interaction with researcher and participant relating to each other as people not objects or means to an end. Such research is guided by principles of friendship, equality, and freedom and must not dehumanise the self or other or harm the researcher, participants or community in any way. Knowledge (in action) is gained through communication. It is a process of sharing between the self and the other and necessarily involves self-revelation and self-discovery as well as understanding of the revelations of the other. Understanding is inter-subjective, arising from shared dialogue between researcher and participants (Schultz and Lavenda 2005). Similarly, the product of the research is a form of communication – a transmission of knowledge – between the researcher, participants, and audience.

It should be noted that the framework discussed above is an ideal. Mutuality cannot be compelled. If any party distanced themselves from the other, then generated knowledge becomes less complete. This does not mean that it is worthless or that personal enquiry should not be attempted – any move to understand social world personally will result in social knowledge becoming less abstract. Rather, researchers need to be honest about the nature of the knowledge generated and the claims that can be made from it.

As discussed in chapter 1, research can encourage personal enquiry in a number of ways. Appendix 2 discusses the ways the principles of action and mutuality were considered in developing the research methods used in this research, while the methods themselves are specified in appendix 3.

APPENDIX 2
Applying a Methodology

This research is underpinned by philosophies of action and mutuality (see appendix 1). In actioning these methodological premises, this research has looked to: (1) provide knowledge of the phenomena through practical experience or interaction; (2) acknowledge that the social world can be explored from multiple perspectives; (3) ensure participants are related to as other people, not as objects or means to an end; and (4) ensure research decisions are guided by MacMurray's principles (1929, 1950, 1961, 1962, 1968) of friendship, equality, and freedom. This appendix discusses the rationale behind the methods used in this research and their alignment with the above criteria. Appendix 3 specifies the research methods themselves.

Multiple Research Methods

Academic concepts can be approached in different ways (Buber 1970; Meloy 2002) and both quantitative and qualitative methods can provide understanding and insight into a variety of different phenomena: the visual, artistic, scientific, mathematical, cultural, psychological, and ethnographic are simply different ways of looking at the same thing. MacMurray (1967, 1968) argues that the scientific, artistic, and personal are all valuable in providing understanding. As discussed in chapter 1 and appendix 1, it is important to try to make research more personal and to acknowledge both the nature of the knowledge generated from the research and the claims that can be made from this knowledge.

To achieve the research objective of providing an understanding of literacy in CIE, research methods were designed to both establish the context in which CIE operates and to investigate literacy in CIE (including what it means; how it is used; its role in the workplace, training, and learning; and motivators or barriers to literacy).

Establishing Context

This research contains a section examining the social, economic, and political environment in which CIE operates. I believe establishing context in research is

important because failure to investigate the social, economic, and political contexts of people, communities, and institutions ignores some of the most significant dimensions of social life (Barrett 1996). Failure to adequately present phenomena in their own worlds prevents understanding of their uniqueness and complexity (Stake 2005).

Nature of Generated Knowledge: Establishing Context

This aspect of the research, part I, was primarily written before I started fieldwork and revised thereafter. It contains background information from multiple perspectives and paradigms on ideas, policies, and understandings that directly and indirectly affect the social fabric of life in CIE and literacy in this environment. Part I provides a mix of scientific and artistic knowledge about literacy, education, employment, CIE, and the Department of Corrections. Relying on research, literature, documents, and reports it is one-step-removed from the practical experience that personal enquiry requires. Thus, it contains generalised knowledge, insight, or information, not detailed knowledge, and provides the reader with a background of the situation.

Detail Through Case Studies

This research uses anthropological research methods to provide a more detailed, practical understanding of literacy in CIE. Anthropological methods were chosen because anthropology is a discipline that broadly describes what it means to be human, the social world, and social phenomena (Schultz and Lavenda 2005); my early reading showed literacy is both a social and a personal concept (Meek 1991).

Participant Observation

Short participant observation sessions of two to three days at each site were selected to provide a picture of life in each industry and to gain an understanding of how things worked. In designing the research I was mindful of the time demands that participant observation would have on the Central Kitchen and Print Shop. I knew each time I visited the prison, my security would become the responsibility of staff and that each question I asked would mean five minutes away from the job or training for staff or prisoners. My research methods needed to try to minimise the commitment required by participants, without compromising outcomes. With this in mind I decided to use participant observation sessions to provide me with an overview of the environment, and to explore local meanings and understandings using participant interviews. While two to three days would not be long enough to provide a ‘thick description’ (Geertz

1973) of life in each industry, it would help illustrate the local meaning of phenomena being investigated. Observation alone would not fully uncover the multiple perspectives and interpretive frameworks operating in CIE – central features of thick description (Atkinson and Delamont 2005) – but staff advised that it provided enough time to observe the full range of workplace tasks. Participants' perspectives and understanding would be investigated more fully through in-depth and focus group interviews.

In-depth Interviews

In-depth interviews (Liamputtong and Ezzy 2005) and focus group interviews (see next section) were selected to provide a more detailed understanding of literacy in CIE. In-depth interviews (also known as focused, unstructured, non-directive, open-ended, active, or semi-structured interviews) investigate people's understandings of processes, events, concepts, relationships and situations (Liamputtong and Ezzy 2005). Researchers gain insight and understanding into participants' experiences, interpretation, views, and perspectives by enquiring and listening. In-depth interviews are thus a form of two-way communication – a conversation. In this sense, in-depth interviews co-construct reality: "[they] are not merely an opportunity to discover information that already exists. Meanings and interpretations predate interviews and continue on after them… [in these interviews]… meanings are created, recreated, and transformed" (Liamputtong and Ezzy 2005, 55).

Liamputtong and Ezzy (2005) argue there are no set rules for in-depth interviews. However, their review of the literature showed most in-depth studies consist of a single interview of 90 minutes and that genuine sincerity, interest, curiosity, and the ability to listen and engage with participants were key elements of the interviews. They also recommended that interviews are both inductive and deductive; that the researchers could have topic or theme lists but should also allow themselves the freedom to explore new avenues and linkages as they arose.

I chose to employ in-depth interviews because they held the potential for active engagement and mutuality, thus allowing personal knowledge of the social world. The active role of both participant and researcher allows a relationship between the self and other. Mutuality is possible if both parties participate freely, are equal partners in conversation, are free to share what they feel is important, are respected, listened to, and valued.

While it was practical to interview four staff members individually it was less practical to interview fifty prisoners about literacy and employment. Not only would

this mean 50-75 hours of interviews, then transcription, it also meant interviews could not take place in CIE time and that individual arrangements for access were needed for each interview. Furthermore, managers indicated that, from their experience, prisoners with low literacy levels may feel uncomfortable talking about literacy with an unknown person and that a number of interviews would have to take place before this could happen. After weighing investment against research goals (Liamputtong and Ezzy 2005), I decided a focus group interview would be a more appropriate mechanism for interviewing prisoners.

Focus Group Interviews

Focus groups interviews (Liamputtong and Ezzy 2005) were selected to gain an understanding of prisoners' perspectives of literacy in CIE. Focus groups generate understanding by encouraging groups of people to talk about their experiences. They allow exploration of the range of views of a community but in isolation do not indicate the prevalence of these views. When they work well, participants act as co-researchers discussing and investigating a variety of viewpoints and uncovering dimensions of understanding that could otherwise remain unexplored. Focus groups can be useful when discussing sensitive issues or encouraging apprehensive participants to talk about their experiences. Interaction between participants can also help them explore and clarify their views. However, although focus groups can generate in-depth information, they do not necessarily investigate the complexity of individuals' beliefs and practices.

In their review of the literature, Liamputtong and Ezzy (2005) found successful groups were conducted in an appropriate environment, and had clarity of purpose, sufficient resources, appropriate participants, and a skilful moderator. Better quality information is gathered if participants are not overloaded with questions, if the meaning of questions are clear, and if participants feel respected and taken seriously. Liamputtong and Ezzy (2005) found most focus groups took approximately 90 minutes. The number of people in each group (usually 6-12) and number of focus groups or sessions required depended on the situation and on research objectives.

I chose to employ focus group interviews for prisoners because they allowed me to gather a wide range of perspectives in a shorter period of time. The ability to allow participants to act as co-researchers also provided potential for active engagement and mutuality. However, in selecting this research method I also acknowledged that personal enquiry may be limited as some participants may not wish to share their views in a group situation.

Facts, Figures, and Measures

Where possible, I chose to supplement these more qualitative research methods with relevant figures and statistics to provide another perspective of literacy in CIE. To help describe workplace literacy in CIE I chose to employ a measure of literacy using a tool developed by Workbase (2006b). I felt it would help me outline the various literacy skills and literacy tasks embedded in workplace tasks and allow literacy in CIE to be assessed more functionally. Given more time, I would have liked to develop a regression model from recent research on predictors of low literacy proficiency (Culligan et al. 2004) to compare the literacy levels of prisoners in the case studies with other prisoners in CIE and the wider population. I would have liked to create a demographic profile of prisoners in the case studies to provide more context for the research. I would have also liked to investigate the literacy prisoners require to gain NZQA qualifications in more detail.

Nature of Generated Knowledge: Detail Through Case Studies

This aspect of the research is presented in part II of the thesis and was written after I completed fieldwork from information collected in the field, site visits, participant observation, interviews, and focus groups, and the Department of Corrections. It draws together my observations as researcher and participants' perspectives on literacy in CIE and explores the connections between the literacy, local situations, and meaning. Observations are discussed in relation to the literature and the work of other researchers. The findings presented are closer to the personal as they present my practical experience of literacy in CIE, they include my understandings and rewards of participants' perspectives, and they outline a number of view points on the topic. In addition, I did my best to engage with participants on equal terms and with respect; as people. However, I feel findings still provide a mix of scientific and artistic knowledge about literacy, education, employment, and CIE. Although I like to think there may be some insights that are more personal, the work mostly contains generalised knowledge, insight, or information – not detailed knowledge – of literacy in the Central Kitchen and Print Shop.

APPENDIX 3
Research Methods

This research uses multiple research methods to provide an understanding of literacy in CIE. These include: (1) examining the context in which CIE operates; (2) investigating literacy in two CIE industries in the Wellington region; and (3) describing the literacy demands, tasks, and skills in each industry. Figure 1 (in chapter 1) shows the relationship between the Central Kitchen, Print Shop, CIE, Corrections, and the Community and the research methods used to investigate literacy in each environment.

1. Examining the context in which CIE operates. Existing literature was examined to provide an understanding of the social, economic, and political environment in which CIE operates. As discussed in appendix 2, this looked at the documents, research, situations, institutions, organisations, policies, strategies, and stakeholders that impact on and influence both literacy and CIE.

2. Investigating literacy in two CIE industries in the Wellington region. Investigating literacy in two industries in the Wellington region was conducted through case studies at two of the largest local CIE industries – Rimutaka Prison's Central Kitchen and Wellington Prison's Print Shop. At each site this involved:

— Gathering information on the industry's background and operation, collecting workplace documentation, and taking a site tour.

— Observing a normal working day and shadowing staff and prisoners at work. Research participants were the normal staff and prisoners working in the industry during the research, and the CIE Business Manager responsible for each industry. Workplace observation was conducted in the Central Kitchen on August 14 and 16, 2007 and the Print Shop on September 14 and 20, 2007.

— Conducting separate 90 minute, unstructured interviews with the Business Manager and CIE Instructor covering industry goals, processes, tasks, systems, and requirements; literacy and communication in the workplace; required skills and competencies in the workplace; and training, education and learning (see appendix 4 for interview schedules). Interviews occurred after workplace observation. In the Central Kitchen the Business Manager interview was conducted on August 16, 2007 and the Catering Instructor interview on August

16, 2007. In the Print Shop the Business Manager interview was conducted on October 11, 2007 and the Printing Instructor interview on September 26, 2007.

— Conducting a single focus group interview with the prisoners who normally worked in the industry (see Appendix 4 for focus group questions). In the Central Kitchen this took approximately 90 minutes and involved three prisoners. In the Print Shop this took two 90-minute sessions and involved nine prisoners. The interviews were conducted after workplace observation. In the Central Kitchen the prisoner focus group interview was conducted on August 28, 2007. In the Print Shop it was conducted on October 18, 2007.

3. Describing the literacy demands, tasks, and skills in each industry. In addition to workplace observation and interviews, Workbase's 'descriptor bank' (2006a) was used to record literacy tasks and skills required for work. The descriptor bank is a tool developed by Workbase to describe literacy skills embedded in NZQA unit standards and qualifications by providing a common language to talk about literacy across different qualifications. Appendix 5 outlines literacy descriptors identified by Workbase. In interviews, Instructors were asked to assign descriptors to positions in the catering and printing industries.

Consent

Approval for the project was first received from the Massey University Human Ethics Committee: Southern A. An application to undertake research was then submitted to the Department of Corrections. CIE Business Managers were approached by email then telephone and provided with information about the research once permission from the Department of Corrections was received. Business Managers organised for the researcher to observe the industries and talk to relevant staff. Information about the research was also provided to staff by the researcher and written permission was received from all participants at the start of their first meeting. Instructors informed prisoners about the research. Once on site, the researcher approached prisoners as they went about their work, explained the research, and asked if they would like to participate. If they agreed, they were asked to sign a consent form or to give their consent verbally. Most prisoners knew about the research before the focus group interviews occurred. They were invited by the CIE Instructor to be involved in a group interview before the researcher arrived. On arrival, the researcher explained the research, answered questions, and received permission from prisoners who had not already given permission to partake in the research. See appendix 6 for copies of information sheets and consent forms.

APPENDIX 4
Interview Schedules and Questions

Business Manager and Instructor Interview Schedule

Topics discussed during unstructured interviews:

Industry operation and processes (including nature of work, work force, staff)

Reporting systems

Learning (including curriculum, work skills, learning pathways)

Teaching (including methods, requirements, styles, training, support)

Assessment (including qualifications, assessment, literacy)

Literacy, numeracy, and language (including meaning, use, levels, communication barriers, training)

Focus Group Questions

Questions used as starter for focus group discussion:

If you had to sum up in a sentence what you do in CIE what would you say?

Is work in CIE similar or different to other work you have done? How?

What about learning? Is learning in CIE similar or different to other education or training you have done? How?

What kinds of things have you learned in CIE? Do you think these are useful?

What parts of CIE do you find easiest and most difficult? Why?

In CIE, how do you know if you are doing a good job?

Thinking of someone who does a good job, what skills, abilities, or qualities do they have?

Do you think qualifications (NZQA unit standards etc.) indicate whether someone is good at their job? Why? Why not?

How would you define “literacy”? What about “numeracy”?

Literacy from a Māori perspective is the "lifelong journey of building the capacity to 'read' and shape Māori and other worlds"

In this sense, literacy is a tool for understanding and influencing life.

What tools do you use to understand and influence things? Is literacy one of them?

How do you know if you are literate or numerate?

In CIE, how is literacy and numeracy used? What is it used for? Give me some examples.

Do you think literacy in CIE is different from literacy in other areas of your life? How?

In your experience, is literacy and numeracy important for participation in CIE? Why? Why not?

Do you think it is important in workplaces outside? In what ways?

If you could get more help with anything in CIE what would it be?

Would assistance with work-related literacy or numeracy tasks help you get more out of CIE? What kind of assistance? What would motivate you to take this up?

What else do you think I need to ask/know if I want to understand literacy in CIE?

APPENDIX 5
The Descriptor Tool

Workbase's descriptor bank project (Workbase 2006b) creates a common language for thinking and talking about literacy in qualifications. It identifies different levels of literacy (reading, writing, speaking and listening, numeracy, and critical thinking skills) embedded in qualifications. The following descriptors briefly outline these levels of literacy. This information is sourced from: Workbase. 2006. *The descriptor bank project: Describing the literacy in unit standards.* Workbase: Auckland.

Reading

R1	Recognise and interpret pictures, symbols, abbreviations, and codes
R2	Recognise relevant technical vocabulary
R3	Read and understand very short documents
R4	Read and understand short workplace documents
R5	Read and understand complex workplace documents
R6	Read and interpret information from a number of documents

Writing

W1	Complete simple workplace documentation
W2	Write a brief factual statement
W3	Write a paragraph
W4	Write a longer piece of text
W5	Write a complete workplace document

Speaking and listening

SL1	Listen to procedures and instructions given orally and respond appropriately
SL2	Understand and use technical and industry terms

SL3	Give factual information orally and check for understanding
SL4	Organise and sequence information and present it orally
SL5	Participate in discussions with work team

Numeracy

N1	Recognise and understand alphanumeric codes
N2	Understand a range of numerical concepts as they apply to specific jobs
N3	Record data from workplace observations or measurements
N4	Carry out simple calculations for specific work tasks
N5	Carry out a range of measurements

Critical thinking

CT1	Identify when workplace procedures are not being met and take appropriate action
CT2	Recognise significant events not covered by procedures and take appropriate action

APPENDIX 6
Information Sheets and Forms

CIE Staff Information Sheet and Consent Form

Literacy and prisoner employment

INFORMATION SHEET

Research project

I am Rose Artemiev. I am looking at literacy and employment for a thesis towards a Masters in Management at Massey University.

This research will investigate literacy in CIE and provide a greater understanding of the way literacy is used in the CIE environment.

I believe this research could provide Corrections with valuable insights into prisoner literacy and employment.

This research will benefit prisoners as it looks to provide greater understanding about literacy in the Corrections Inmate Employment environment. This could be used to improve both literacy and employment training and opportunities for prisoners.

The research may also have positive social outcomes. Research shows having a job to go to is a factor in reducing re-offending. Understanding literacy practises in CIE can provide a base for improved training and potentially increase prisoner employability. This could have positive impacts in terms of reducing the cost of crime and ultimately making communities safer.

Invitation

With your permission, some of the information for this research will be collected by sitting in on your industry-training programme, noting how literacy is used, and by talking with you about the literacy skills prisoners need and use in your CIE programme.

What this means

- I would sit in on your CIE programme and make notes about literacy is used in your programme. I would like to spend up to a week observing literacy activities in your industry.
- I will ask you and prisoners questions about literacy, the CIE programme, what you/they are doing, and why.
- I will ask to interview you at a later, mutually suitable date about literacy and the types of literacy that prisoners use in CIE. This is expected to take around an hour.

- When I interview you I will have an audiotape running. This is to help me remember your answers.

If you do not want to be taped in the interview I can write your answers down. If you are happy to have your answers taped, you can listen to the tape at the end of the interview if you wish and make any changes. If you decide you wish to change your responses in the two days after the interview please contact me at the numbers below and I will arrange this.
I will also ask you for help in providing prisoners with information and collecting consent forms and in contacting me if prisoners have any questions about the research.

Use of information
I will keep your answers safe. Any tapes, written answers, and consent forms will be kept locked away. After five years, all tapes, written answers, and consent forms will be destroyed.
Your answers will be compiled with other people's answers where possible. I ensure that any information you give me will be held as strictly confidential, however, please be aware there will only be a few instructors being interviewed in the research. While strict confidentiality measures are in place, complete anonymity cannot be guaranteed.
I will use the answers you give to write a research report. This may be published in an academic journal. The Department of Corrections may also use the report to assist its policy and programme decisions.

Taking part
If you are happy for me to observe literacy in your workshop/kitchen/classroom/nursery [TBC] please fill out the consent form and return it to me.
Please note, I am interested in your views on literacy in CIE and there are no right or wrong answers. This is not about evaluating or critiquing the way your programme is run in any way but about increasing my understanding of literacy in CIE and the ways prisoners use literacy.
If you decide to participate, you have the right to:
- refuse to answer any question,
- withdraw from the study at any time,
- ask questions about the study at any time during participation,
- provide information on the understanding that your name will not be used unless you give permission to the researcher,
- ask for the audiotape to be turned off at any time during the interview,
- receive a written copy of your interview, if wanted,
- be given a summary of the research findings of the end of the project, if wanted.

Not taking part
You do not have to accept the invitation to take part in the research.

More information
I will be happy to answer any questions or provide you with information about the project and what it entails. My supervisor, Associate Professor Frank Sligo, is also happy to answer any questions about this project or the Literacy and Employment Project.

Rose Artemiev
Department of Communication and Journalism
Private Box 756
Wellington
Massey University: (04) 801 5799 x 6182
Mobile (021) 967 091
r.artemiev@massey.ac.nz

Associate Professor Frank Sligo
Department of Communication and Journalism
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This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 06/51. If you have any concerns about the conduct of this research, please contact Professor John O'Neill, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 350 5799 x 8635, email humanethicsoutha@massey.ac.nz.

Literacy and prisoner employment

PARTICIPANT CONSENT FORM

This consent form will be held for a period of five (5) years

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

In agreeing to participate in this study (please circle):

I agree / do not agree for the researcher to make notes and ask me questions under the conditions set out in the information sheet.

I agree / do not agree to be interviewed by the researcher under the conditions set out in the information sheet.

I agree / do not agree to my interview being audio taped.

Signature:	**Date:**

Full name (printed)

Prisoner Information Sheet and Consent Form

Literacy and prisoner employment

INFORMATION SHEET

Research project
I am Rose. I am looking at literacy and employment for a thesis in a Masters of Management at Massey University.
This research will look at literacy in CIE. Through it I hope to gain a greater understanding of the way literacy is used in the CIE environment.

Invitation
With your permission I hope to collect some of the information for this research from you.

What this means
- I will sit in on CIE and make notes about the work you are doing.
- I may ask you questions about learning, CIE, what you are doing, and why.
- I will ask you to participate in a group interview, with others in your CIE industry about workplace communication, job skills, training, education, and CIE.

Please note, I am not there to judge your reading, writing, or work. I want to know about workplace communication in CIE.
When I interview you I will have an audio-tape running. This is to help me remember your answers. You can listen to the tape at the end of the interview and change any of your answers.
I will make any changes you have up to a week after the interview. If you have changes in this time you can ask your Instructor to contact me.
If you do not want to be taped in the interview I can write your answers down.

Use of information
I will keep your answers safe. Any tapes, written answers, and consent forms will be kept locked away. I will destroy these after five years.
I will use your answers to write a report. I will treat your answers as confidential. I will not share them directly with your instructor or the Department of Corrections. However, I may ask them about an idea that someone has raised. This person will not be identified.
The report I write may be published in an academic journal. The Department of Corrections may use the report to help it make better decisions about education and training.

Taking part
If you would like to take part your Instructor has consent forms. Please fill one out and return it to them.

You can take part in the research in two ways:
Observation and questions. I will be sitting in on your CIE class soon, taking notes and asking questions about learning in CIE. You can answer my questions if you wish.
Interviews. Later on, I will ask you to participate in a group interview with others in your CIE industry about learning and work in CIE. You can agree if you wish.
If you decide to take part, you have the right to:

- refuse to answer any question,
- withdraw from the study at any time,
- ask questions about the study,
- provide information on the understanding your name will not be used,
- ask for the audiotape to be turned off at any time during the interview,
- receive a written copy of your interview, if wanted,
- be given a summary of the research findings at the end of the project, if wanted.

Not taking part
You do not have to take part in the research. I will still sit in on the CIE programme and talk to people who wish to take part.

More information
I will be happy to answer any questions or provide you with information about the project. You can ask questions when I visit your CIE class or during your interview. You can also pass on questions through your Instructor.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 06/51. If you have any concerns about the conduct of this research, please contact Professor John O'Neill, Chair, Massey University Human Ethics Committee: Southern A, telephone 06 350 5799 x 8635, email humanethicsoutha@massey.ac.nz.

Literacy and prisoner employment

PARTICIPANT CONSENT FORM

This consent form will be held for a period of five (5) years

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

In agreeing to participate in this study (please circle):

I agree / do not agree for the researcher to make notes and ask me questions under the conditions set out in the information sheet.

I agree / do not agree to be interviewed by the researcher under the conditions set out in the information sheet.

I agree / do not agree to my interview being audio taped.

I have not been pressured by [name of Prison] Prison, Department staff, the researcher or any other person to be interviewed and I freely give my informed consent.

Signature:	**Date:**

Full name (printed)

APPENDIX 7
Work Tasks and Communication Activities in the Central Kitchen

Table A1 shows some of the work tasks and communication activities in the Central Kitchen. The list is compiled from workplace observation and interviews with staff and prisoners.

Table A1. Work Tasks and Communication Activities in the Central Kitchen

Role	Work Tasks	Communication Activity
Trolley Puller	Stack required number of tray lids onto trolleys	Read muster board to identify the number of meals each unit requires (see figure 8)
	Cover meals with lid and stack each unit's trolley	Read trolley loading diagram and stacking trays onto trolley appropriately (see figure 11)
	Deliver meals to units by hand or load trolleys onto truck for delivery	Read meal tags to identify special meals
	Collect trays	Read common kitchen signs and texts
	Wash dishes using industrial dishwasher	Read labels indicating units where meals need to be delivered
	Clean	Read controls on dishwasher
	Follow kitchen rules and health and safety and food hygiene guidelines	Read cleaning product labels and instructions
		Read kitchen rules and health and safety material
		Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations)
		Count tray lids onto trolleys
		Count number of meals, including special diets
		Communicate with other trolley pullers over meals, numbers, loading, and unloading trolleys
		Communicate with sandwich hands to coordinate work
		Communicate with Instructor about workplace tasks and training
		Communicate with other workers about workplace needs, non-work topics, etc.
Dish Washer	Wash dishes	Read cleaning product labels and instructions
	Follow kitchen rules and health and safety and food hygiene guidelines	Read controls on dishwasher
		Read kitchen rules and health and safety material

Table A1 (*continued)*

Role	Work Tasks	Communication Activity
		Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations)
		Communicate with trolley pullers over dishes
		Communicate with Instructor about workplace tasks and training
		Communicate with other workers about workplace needs, non-work topics, etc.
Sandwich Hand	Serve food onto trays paying attention to special dietary needs (e.g. vegan, vegetarian)	Read muster board and special diets' sheets to identify meal requirements and amounts
	Make sandwiches and pack lunches	Read menu
	Prepare toast for breakfast	Read special diets' sheet and labels (e.g. brown bread, unit six) and match labels to food
	Clean	Read common kitchen signs and texts
	Follow kitchen rules and health and safety and food hygiene guidelines	Read kitchen rules and health and safety material
		Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations)
		Calculate sandwich numbers, types (e.g. special diets), and portions/ingredients.
		Serve/portion food onto trays
		Communicate with other sandwich hands over breakfasts, lunches, special diets, meal numbers, equipment, serving, etc.
		Communicate with cooks to coordinate work
		Communicate with Instructor about workplace tasks and training
		Communicate with other workers about workplace needs, non-work topics etc.
Prep Cook	Prepare sandwich fillings	Read menus to identify required fillings
	Manage sandwich filling ingredients	Read muster board and special diet sheets to identify meal requirements
	Clean	Read food labels and use-by dates
	Follow kitchen rules and health and safety and food hygiene guidelines	Read controls on kitchen equipment (e.g. meat slicer, gas cookers, etc.)
		Read common kitchen signs and texts
		Read kitchen rules and health and safety material
		Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations)
		Calculate portions and ingredients amounts
		Communicate with Instructor about workplace tasks and training
		Communicate with other workers about workplace needs, non-work topics, etc.

Table A1 (*continued)*

Role	Work Tasks	Communication Activity
Cook	Prepare and cook meals using variety of kitchen equipment (e.g. knives, scales, oven, deep fryers, hotplates, boiler pots) Put food into serving trays Clean Follow kitchen rules and health and safety and food hygiene guidelines	Read muster board and special diet sheets to identify meal requirements and amounts Read menus and recipes Read food labels and use-by dates Read controls and gauges on kitchen equipment (e.g. ovens, gas cookers, scales, etc.) Read common kitchen signs and texts Read kitchen rules and health and safety material Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations) Calculate meal numbers, meal types (e.g. special diets), and portions/ingredients. Calculate, estimate, and measure temperatures, weights, quantities, amounts, and timings Communicate with other cooks over meal numbers, preparation, special diets, equipment, timings, meal coordination, etc. Communicate with veggie hands and sandwich hands to coordinate work Communicate with Instructors about workplace tasks and training Communicate with other workers about workplace needs, non-work topics, etc. Plan and manage preparation and cooking tasks
Vege Hand	Prepare vegetables for cooking Manage stock levels, unpack, and store produce Clean Follow kitchen rules and health and safety and food hygiene guidelines	Read menus to determine how to prepare produce Read muster board to identify meal requirements and amounts Read common kitchen signs and texts Read kitchen rules and health and safety material Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations) Calculate and estimate produce quantities to prepare (e.g. bins or trays) or order (e.g. bags, trays, pallets) Count bins and trays of veggies Communicate with other veggie hands over preparation, numbers, equipment, stock, etc. Communicate with cooks about how veggies need to be prepared and to coordinate work Communicate with Instructors over stock levels Communicate with Instructor about workplace tasks and training Communicate with other workers about workplace needs, non-work topics, etc.

Table A1 *(continued)*

Role	Work Tasks	Communication Activity
Store Man	Deliver meals to units using trolley Deliver milk Manage fruit, bread, and milk including portions and stock management Clean	Read muster board, meal sheets, and orders to determine fruit, bread, and milk orders Read use-by dates and product labels Read kitchen rules and health and safety material Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations) Write labels showing milk deliveries Count and portion fruit, bread, and milk Communicate with Instructor about workplace tasks and training Communicate with other workers about workplace needs, non-work topics, etc.
PCU (rations)	Portion cereal, butter, jam, spreads etc. Serve meals	Read menus to identify meal requirements Read muster board to identify required quantities Read common kitchen signs and texts Read kitchen rules and health and safety material Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations) Calculate and estimate portions Serve/portion food onto trays Communicate with sandwich hands over serving, etc. Communicate with Instructor about workplace tasks and training Communicate with other workers about workplace needs, non-work topics, etc.
Driver	Load truck and deliver some trolleys to unit Unload truck and collect empties	Reading required for driving and to procure an HT licence. Read labels on trolleys to determine where to deliver them Communicate with trolley pullers and Corrections Officers about deliveries Communicate with Instructor about workplace tasks and training Communicate with other workers about workplace needs, non-work topics, etc.

APPENDIX 8
Work Tasks and Communication Activities in the Print Shop

Table A2 shows some of the work tasks and communication activities in the Print Shop. The list is compiled from workplace observation and interviews with staff and prisoners.

Table A2. Work Tasks and Communication Activities in the Print Shop

Role	Work Tasks	Communication Activity
Plate Maker	Use plate making equipment (such as light boards, developer, plate maker, etc.) to make film from hard-copy images to client specifications Make offset printer plates from film (this may include colour separation and layout work) Follow print shop rules and health and safety guidelines	Read job bags to identify job requirements Read and adjust machine dials, gauges, and settings Read product labels and instructions Read print shop rules and health and safety material Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations) Proof read to ensure layout and type-setting work is correct Lay out simple text and images Write labels for plates and plate storage folders Measure and calculate proportions and distances (especially when laying out documents) and ensure design meets style guide and offset printing requirements Calculate amount of raw materials to use (e.g. chemicals) Communicate with other workers (especially digital and offset printers) to coordinate work Communicate with Instructor about workplace tasks and training Communicate with other workers about workplace needs, non-work topics, etc. Identify required equipment and adjust processes and settings as appropriate Identify and understand the colour production and chemical processes involved in the printing process to ensure plates are suitable for job

Table A2 (*continued)*

Role	Work Tasks	Communication Activity
		Identify raw products and their use for each job
		Identify non-conforming product, quality check work, and adjust process and settings as appropriate
Guillotine	Use guillotine to cut paper for printers and trim printed documents	Read job bags to identify job requirements
	Follow print shop rules and health and safety guidelines	Read and adjust machine dials, gauges, and settings (e.g. programmes, pressure, cut settings etc.)
		Read machine instructions and manuals
		Read product labels and instructions
		Read printing marks and technical language on printed materials
		Read print shop rules and health and safety material
		Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations)
		Calculate and measuring paper sizes, dimensions, and quantities for required products and work to timeframes
		Communicate with other workers (especially offset and digital printers) to coordinate work
		Communicate with Instructor about workplace tasks and training
		Communicate with other workers about workplace needs, non-work topics, etc.
		Identify common cuts and programme them into the guillotine
Offset printer	Use plates and offset printing machine to print booklets, safety manuals, letter heads, business cards, Christmas cards, check lists, documents	Read job bags to identify job requirements
	Follow print shop rules and health and safety guidelines	Read and adjust machine dials, gauges, and settings
		Read machine instructions and manuals
		Read text, abbreviations, and technical language on raw materials, products, printing equipment, and tools like colour charts, plates, paper, documents, chemicals, inks, micrometers, etc.
		Read product labels and instructions
		Read print shop rules and health and safety material
		Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations)
		Calculate settings for machines and products like pressure, heat, ink film thickness, cylinder settings, paper thickness, machine speed, etc.
		Calculate impression numbers and timings to work out job durations, etc. and meet deadlines
		Calculate volume of paper and other raw materials by weight, etc.

Table A2 (*continued)*

Role	Work Tasks	Communication Activity
		Communicate with other workers (especially guillotine and plate maker) to coordinate work
		Communicate with Instructor about workplace tasks and training
		Communicate with other workers about workplace needs, non-work topics, etc.
		Identify and understand the colour production and chemical processes involved in the printing process
		Identify raw products and their use for each job
		Identify non-conforming product, quality check work, and adjust process and settings as appropriate
Digital Printer	Use computer graphics equipment (e.g. Macs) to layout documents to client specifications	Read job bags, emails, faxes, style guides, and manuals etc. to identify job requirements
	Print documents using digital printers or send mock up to offset printers (via plate maker) or to vinyl printer	Read and understand text, abbreviations, and technical language associated with digital printing machinery like Macs, PCs, digital printers, raw materials, products, and tools
	Follow print shop rules and health and safety guidelines	Read and adjust machine dials, gauges, and settings
		Read machine instructions and manuals
		Read product labels and instructions
		Read print shop rules and health and safety material
		Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations)
		Work with and manipulate text and images to meet job requirements e.g., laying out, reproducing, type-setting, editing, proof reading
		Create, manage, and store digital images and text files on PCs and Macs, data management and storage systems, etc.
		Calculate settings for machines and products (including calculations involved with design packages)
		Calculate numbers and timings to meet deadlines
		Communicate with other workers (especially plate maker and bindery) to coordinate work
		Communicate with Instructor and other workers about customer requirements
		Communicate with Instructor about workplace tasks and training
		Communicate with other workers about workplace needs, non-work topics, etc.
		Identify non-conforming product, quality check work, and adjust process and settings as appropriate
		Identify raw products and their use for each job

Table A2 (*continued)*

Role	Work Tasks	Communication Activity
		Identify customer requirements, use computer design packages to layout work, use appropriate printing processes to complete jobs (e.g. digital, offset, vinyl, etc.)
		Identify non-conforming product, quality check work, and adjust bindery process and settings as appropriate
		Understand design principles, language, measurements, image properties, and terminology like vectors, pixels, points, etc. on PCs and Macs
Bindery	Collate printed material, bind, wrap, and pack for dispatch	Read job bags and order forms to identify job requirements
	Follow print shop rules and health and safety guidelines	Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations)
		Count product and calculate quantities to fill orders (includes using calculators and scales)
		Calculate product quantities by weight
		Communicate with other workers (especially printers and dispatch) to coordinate work
		Communicate with Instructor and other workers about customer requirements
		Communicate with Instructor about workplace tasks and training
		Communicate with other workers about workplace needs, non-work topics, etc.
		Indentify correct order for document pages and assemble using appropriate binding
		Identify non-conforming product, quality check work, and adjust bindery process and settings as appropriate
Dispatch	Fill customer orders and dispatch	Read request forms, job bags, emails, faxes, notes, etc. to identify job requirements
	Manage stock room and stock billing systems and databases	Read product labels and matching items to product codes
	Follow print shop rules and health and safety guidelines	Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations)
		Write job details in order book (including dates, customer names, addresses, document numbers, job numbers, cost centres, order details, courier details, etc)
		Write dispatch dockets and delivery labels (often on the computer)
		Write stock inventories and maintain computer-based stock databases
		Write invoices and cost jobs using a computer-based system
		Calculate amounts of product required to fill orders

Table A2 (*continued)*

Role	Work Tasks	Communication Activity
		Calculate postage using scales and reference charts
		Communicate with other workers (especially bindery) to coordinate work
		Communicate with Instructor and other workers about customer requirements
		Communicate with Instructor about workplace tasks and training
		Communicate with other workers about workplace needs, non-work topics, etc.
		Identify and clarify customer requirements and check products meet these
Plastics	Design and produce vinyl products to customer specifications (including folders, ring binders, storage envelopes, note book covers and pad compendiums, document and cd wallets, clip boards, brochure holders, and satchels)	Read request forms, job bags, emails, faxes, notes, etc. to identify job requirements (includes product codes on order forms and raw materials)
		Read and adjust machine dials, gauges, and settings
		Read machine instructions and manuals
		Read instruction manuals, which outline the specifications, settings, raw materials, equipment, and layout for each product
		Read product labels and instructions
		Read text, abbreviations, and technical language on raw materials, products, and tools (including welding pressure, electrode, drill, and plate settings, temperatures, vinyl specifications)
		Read print shop rules and health and safety material
		Read NZQA workbooks and manuals and complete written and oral assessment (may include common workplace calculations)
		Measure and cut materials to correct sizes and layout text and images as per style guides and manuals
		Calculate the quantities of raw materials required to produce products
		Communicate with Instructor about customer requirements
		Communicate with other workers to coordinate work
		Communicate with Instructor about workplace tasks and training
		Communicate with other workers about workplace needs, non-work topics, etc.
		Identify and clarify customer requirements and design products to meet these
		Identify raw products and their usage requirements for specific jobs

Role	Work Tasks	Communication Activity
		Identify non-conforming product, quality check work, and adjust process and settings as appropriate
		Identify and understand plastic fabrication processes
		Identify raw products and their use for each job

NOTES

CHAPTER 1

1. The personal approach combines what are now known as positivist and post-modern viewpoints. It holds a form of existential truth exists; however, it also holds that insight (but never complete understanding) of this truth can be gained from many perspectives. As Buber (1970) and Meloy (2002) argue academic concepts can be approached in different ways and both quantitative and qualitative methods – the visual, artistic, scientific, mathematical, cultural, psychological, and ethnographic – can provide understanding and insight into phenomena.

2. Prior to entering the field, I was reluctant to narrow my research by only gathering data that supported a predetermined framework in case this framework was not appropriate for the information that actually presented itself (Wolcott 1994). At the same time I was aware that my experiences already framed my research decisions (Berreman 1968; Spradley 1979). This proved slightly problematic because in approving my research the Department of Corrections requested details about the measurement or assessment tools to be used, data to be produced, and management of data interpretation. I overcame this tension by choosing methods (see appendix 2 and 3) and definitions (see chapter 3) that allowed a broadness of data to be collected and by not fixing a system of analysis. As my purpose was to generate understanding about literacy and not test hypotheses I felt this was an appropriate compromise.

3. In all places it should be remembered that both are equally valid ways of presenting information (Buber 1970; Meloy 2002; MacMurrary 1961, 1968) and documented research is a representation of the actual and is only 'true' if we believe the actual continues when it is not being researched (MacMurray 1953). Similarly, post-modernism also argues objective knowledge, grand meta-narratives, and absolute truth are impossible (McGee and Warms 2000; Simons and Billig 1994) because the truth, knowledge, or fact that research records can only ever be a representation of reality; phenomena are complex and constantly changing; and understanding itself is mediated by self, context, and time.

CHAPTER 3

4. An example of this dual nature is illustrated in Martens' description (1996) of the literacy developments of her daughter. Initially, four year old Sarah's literacy is highly personalised and contextual. Martens (1996) argues that although Sarah's reading was often memorised or creative and her writing unreadable to others, she was literate. Not only did she believe she could read but "everyday she used reading and writing to make sense of and organise her life in natural and authentic ways and to situate herself as a unique participant in her family and social community." As Sarah's literacy developed she was able to represent her meaning in ways accessible and recognisable to others – more conventionally or universally. Instead of squiggles for writing she began to use words and letters. The difference in the appearance of Sarah's literacy products was not that she was becoming more literate, but that she was becoming more proficient, practised, and controlled at orchestrating her literacy process.

5. Both these classifications encompass Hull's functions of literacy (2000). She identifies seven broad functions of literacy. These are performing basic literate functions (like correcting, copying, identifying); using literacy to explain; taking part in discourse around and about text (like citing, reflecting, summarising); participating in the flow of information (like requesting clarification, seeking instruction); problem solving; exercising critical judgement (like evaluating, interpreting); and using literacy to exercise or resist authority.

CHAPTER 4

6. IALS (OECD 1997) measures the prose, document, and quantitative skills of participants. Prose literacy is the ability to understand and use information from texts like books and newspapers. Document literacy is the ability to locate and use information from forms, schedules, tables, graphs, and charts. Quantitative literacy is the ability to use numbers in printed documents to do things like balance a cheque book or complete an order form (OECD 1997).

According to IALS, people are not classed as literate or illiterate but are placed at five levels on a literacy continuum:

Level 1 indicates very poor literacy skills. People at this level may not be able to tell how much medicine to give a child from the instructions on the packet (OECD 1995).

Level 2 indicates weak literacy skills. People may be able to read easy, clearly laid out text and complete simple tasks. "They may have developed coping skills to manage everyday literacy demands, but their low level of proficiency makes it difficult for them to face novel demands, such as learning new job skills" (1995, xi).

Level 3 indicates competent literacy skills (OECD 1997). People can integrate information and solve more complex problems. Level 3 the minimum level of literacy people need to effectively engage in today's society and cope with demands of everyday life. It is roughly equivalent to the literacy skills required to complete secondary school.

Levels 4 and 5 indicate high levels of literacy (OECD 1997). At these levels people can process higher-order information. They can find, summarise, gather, compare, analyse, and evaluate written materials in longer and more complex text, often in a number of stages.

IALS provided a comprehensive and valuable source of information, which governments can use to provide increased assistance for population groups with low literacy levels (Culligan et al. 2004). However, it has also been critiqued for not accounting for the variety of literacies, skills, and coping measures people use in the test and their everyday life (Hamilton and Barton 2000; Johnston 2004) and for the way in which the Levels themselves were statistically determined (Johnston 2004). It should also be noted that the relationships between IALS variables (e.g. literacy and education) are correlational and not causal (Culligan et al. 2004).

In addition, care should be taken about the statement in the introduction of the IALS final report (OECD 2000) that Level 3 literacy skills are the minimum required to cope with the demands of everyday life and work. Johnston (2004) argues this statement is unsubstantiated anywhere in its body. Despite this he notes:

> A host of commentators use this comment… to identify everyone with Level 1 and 2 skills as being unable to function in a knowledge economy and therefore, by extension, in need of training. In New Zealand, about 45% of the working-age population are in either Level 1 or 2… The suggestion that this whole portion of the population is not coping in society is extraordinary, not the least because, in all countries, most people at Level 1 and 2 consider that their literacy skills were good or excellent in the context of both their jobs and their daily live. (2004, 20)

Likewise, Australian research by Black (n.d., 1991) suggests that the belief that many prisoners are illiterate and cannot function in everyday life is a myth. He argues that while many prisoners had low literacy levels when tested, they still manage reasonably well in prison and outside. Johnston (2004) does note however that while people with Level 1 and 2 literacy levels are capable of functioning in society, their participation and productivity would be improved with increased literacy skills.

7. In New Zealand, 45 percent of the working-age population had IALS Level 1 or 2 literacy with 40 percent of this group being employed (Johnston 2004).

Around 20 percent of the working-age population had IALS Level 1 literacy with 45 percent of this group being employed (Johnston 2004). This group often worked in agriculture or fish industries as farmers, gardeners, foresters, fishermen; were plant or machine operators like welders, sewing machinists, meat processors and taxi drivers; or worked in elementary occupations as cleaners, labours, and rubbish collectors (Johnston 2004).

Analysis of the New Zealand IALS data by Culligan et al. (2004) found Maori, Asian, Pacific, and unemployed people were more likely to have low literacy levels and those with high literacy levels were more likely to have upper secondary or tertiary education.

8. In considering the relationship between literacy and employment it is important to note Australian research by Black (n.d.). Black found that economic conditions were more significant in preventing unemployed people from finding work than low literacy levels.

9. Competencies are not limited to skills but include all the knowledge, skills, attitudes, and values people need to do things (Ministry of Education 2005b). They are interrelated and context dependent, varying from novice to expert. The four key competencies are: operating in social groups; acting autonomously; using tools interactively; and thinking. Foundation competencies of literacy, language and numeracy are a sub-group of 'using tools interactively'.

Technically, the competencies framework allows a person to be an expert in some competencies and a novice in foundation competencies. However, it is said that foundation competencies underpin other competencies because they are often required to perform everyday tasks. Draft descriptive standards attempt to define the essence of these foundation competencies (Ministry of Education 2005a). Descriptive standards deem active listening; the ability to speak so others can understand; to read and understand a range of everyday materials; communicate ideas and messages in writing; and use maths to solve problems as key foundation competencies. Other than placing greater emphasis on context and purpose this definition of literacy is very close to that contained in the *Adult Literacy Strategy* (Ministry of Education 2001).

10. Foundation Learning Progressions identify the common sequence of knowledge and skills (or pathways) learners follow in developing foundation competencies; preparing for lifelong learning; and "developing the foundation competencies they need to become successful workers, learners, and members of families and communities" (Tertiary Education Commission 2006b).

11. The Government hopes the standardised assessment tool will help identify people with literacy, numeracy, or language needs, while participation in the international *Adult Literacy and Life Skills Survey* (ALLS) looks to provide information on skill levels, labour market, economic growth, education in New Zealand (Ministry of Education 2005c).

CHAPTER 5

12. Both the *National Adult Literacy Survey* (NCES 1994) and the *Prison Adult Literacy Survey* (Morgan and Kett 2003) use IALS-like methodologies and scales to measure literacy (see chapter 4 and note 6 for a summary of IALS). In 1992, in the United States, 26,000 people including 1,150 prisoners were tested in the *National Adult Literacy Survey* (NCES 1994). This survey was the predecessor of IALS in 1995. In 2001, the literacy and numeracy of Irish prisoners was assessed using the materials and procedures used by IALS in 1995 (Morgan and Kett 2003). Two differences were that the Irish Prison Service combined the prose, document, and quantitative scores into a single literacy score and added a pre-level one category for people who could not complete the screening test.

13. The Department of Corrections (2002) identify low levels of education and unemployment as two factors that contribute to re-offending. During post-sentence assessment, the Department of Corrections tests prisoner to determine if they have a need for literacy or numeracy education. Prisoners with low literacy or numeracy levels are referred to as having a literacy or numeracy need.

The difference between the estimates of prisoner literacy and numeracy levels does not necessarily mean the Department of Corrections is under recording prisoner literacy levels, although this may be the case. Rather, the type of literacy being recorded by the Department of Corrections is different from that recorded using an IALS-type test (see note 6).

In light of the Morgan and Kett (2003) and NCES (1994) studies, it is highly likely the number of prisoners with IALS-defined literacy or numeracy need (i.e. below Level 3) would be higher than 13-17 percent. The government uses IALS as a benchmark for the *Adult Literacy Strategy* which states the poor literacy levels of large numbers of New Zealanders "severely restricts their choices in life and work" (Ministry of Education 2001, 4).

In late 2007, while this research was being completed, prisoner literacy levels were

assessed using the BURT identification tool. The Department of Corrections uses the BURT Reading Test to assess the literacy levels of prisoners. BURT requires learners to read 110 words out loud until ten words are read incorrectly. This does not test reading in context and the test is not normed for adults (Benseman et al. 2006). The Department of Corrections is currently re-evaluating its literacy and numeracy assessment tool (Department of Corrections 2007a).

CHAPTER 6

14. The *National Adult Literacy Survey* also collected statistics on recidivism and literacy. The study found that the literacy levels of repeat offenders did not differ from the literacy levels of first time offenders. However they only provide a partial picture of recidivism as data were collected at one point in time and cannot be used to trace effects resulting from improving the education or literacy levels of prisoners (NCES 1994).

15. Employer referral and job readiness services need to address the poor education levels of prisoners and provide skills which are valuable in the labour market. They need to be in an industry that offenders' criminal records will not prohibit them working in and be relevant in the community they live (Harrison and Schehr 2004). Research by Uggen (1999) suggests higher quality jobs are more effective in reducing recidivism as they can increase social control and decrease motivation to commit crime.

16. Effective Interventions pulls together a number of new and existing policies and programmes from a number of government agencies. It looks at how the Justice Sector can target the underlying causes of crime and reduce re-offending and imprisonment rates (Office of the Minister of Justice 2006).

17. It should be noted that in New Zealand, the upskilling rates of people with high and low literacy levels were similar. The proportion of the population participating in upskilling in each country was not compared.

18. In 2007, there were: 275 prisoners in literacy training programmes, 279 prisoners in numeracy training programmes, and 273 prisoners in both literacy and numeracy training programmes (Department of Corrections 2007c); 9,067 new prisoners; and an average prison population of 5,898 prisoners (06/07 financial year, excluding remand prisoners; Department of Corrections 2007a). In 2006, there were: 589 new enrolments in literacy and numeracy programmes (Von Dadelszen 2006b); 10,356 new prisoners; and an average prison population of 5,786 prisoners (05/06 financial year, excluding remand prisoners; Department of Corrections 2006a). In 2003, there were: around 600 prisoners in literacy and numeracy training (Benseman et al. 2006); 7,211 new prisoners; and an average prison population of 4,823 prisoners (03/04 financial year, excluding remand prisoners; Department of Corrections 2004).

19. The Department of Corrections is currently re-evaluating the literacy and numeracy programmes it provides and has asked programme providers to tender for the delivery of prison-based literacy and numeracy programmes (Department of Corrections 2007a).

20. In terms of the foundation competencies discussed in chapter 4, the Department of Corrections wants to provide prisoners with the foundation competencies of literacy, language, and numeracy. These are classed as key competencies and can be used in a variety of situations (ie universal). However, the Department of Corrections also acknowledges the importance of teaching foundation competencies in ways that are relevant to learners' contexts (i.e. local).

CHAPTER 8

21. It should be noted, the tensions between individual and collective identities that permeate the workplace structures and interactions in both the Central Kitchen and Print Shop go wider than CIE. From my fieldwork, I would argue they arise from the dual requirements of the Department of Corrections to standardise the management of the prison population, yet provide individually target rehabilitation and reintegration assistance to prisoners. At a macro level, similar tensions can be seen in the role of prison in society (and whether its

primary function is custody, rehabilitation, punishment, deterrence, retribution, or to affirm the power of the State; see Newbold [2007] for a discussion of the purposes of imprisonment in New Zealand). At an ideological level, similar tensions are also evident in arguments about the social rights of citizenship (and whether a neo-liberal or collective approach to education, health, housing, and welfare etc. should be adopted; see Humpage [2008] for a discussion of neo-liberalism and social citizenship in New Zealand).

22. A number of factors can affect whether prisoners are able to attend CIE. These may include prisoners being transferred because of muster issues (prisoner number pressures) or to attend specialist programmes at other prisons. It may include prisoners having to attend other rehabilitation programmes, medical appointments, court, or Parole Board Hearings. Likewise, changes to a prisoner's security rating may mean they can no longer attend CIE. Often, for security reasons, prisoners are not told of changes until the last minute.

23. In the Print Shop focus group there was some discussion about the degree of communication and instruction between various roles in the workplace. Some prisoners were less concerned about asking another prisoner for something as long as it was a request and not an order. Newer prisoners noted that established prisoners would have more ability to make requests because "there is some degree of respect that people who have gone and done a long sentence in prison." Prisoners in both groups are careful in their interactions with others until they are able to gauge how they may react to a situation.

24. From my observations, it seems this division stems in part from Corrections' punitive role in society (Newbold, 2007) and the unequal power relationships between the institution and prisoners. There is a definite feeling among prisoners that any institution charged correcting deviance needs to be exemplary itself. Feelings of resentment seem especially strong where standardised operational processes (where prisoners have little choice) cross over into reintegration (where choice is important for engagement) and prisoners feel compelled to participate. Don, a prisoner in the Print Shop, says prisoners often feel the Department of Corrections see them as a source of labour, "'oh, they'll do it because they've got no choice, they have to do it'... and I think that is sort of a disrespect and not acknowledging our humanity.'" Rob explains the impact of this on prisoners in CIE "we've got this little internal conflict going on... We're, we're quite critical of Corrections [when] they make mistakes [like grammar or spelling], because they shouldn't. We've made mistakes, we accept that and we've been punished for it... But we still have to [print it]... we can't change it. They can change us...but..."

25. In practice, however, it seems that easy access to education is not always guaranteed, especially if the education programme is outside the basic education programmes offered by the public prison service. Prisoners in the Print Shop felt that lengthy and complex approval processes for self-funded tertiary study discouraged a number of prisoners from participating in education.

26 Care must be taken in blanket attributing low literacy to social disadvantage (Black n.d.). In his research into prisoner literacy in New South Wales, Australia, Black (n.d.) found it was difficult to attribute distressing life circumstances such as broken families, violent childhood, and poor work records to low literacy levels. Variables like material and emotional poverty and low levels of formal education appeared more significantly related.

CHAPTER 9

27. Workbase was formally known as ARLA Workbase. ARLA (Adult Reading and Learning Assistance Federation) was formed in 1982 after the coalition of 82 literacy programmes to ensure people of Aotearoa/New Zealand are critically literate (Hill 1990). ARLA believes literacy is a basic human right and that literacy training should be free for students, relevant to a learner's environment, and empowering to the learner.

In 1990, ARLA set up ARLA Workbase, a national workplace literacy project, to develop workplace literacy programmes (Johnson 2000). ARLA Workbase tasks itself with developing best practice literacy and basic education practices and policy for the workplace.

In 1996, Workbase split from ARLA and became an independent not-for-profit

organisation (Johnson 2000). Workbase aims to improve the literacy, numeracy, language, information technology, and communication skills of the New Zealand workforce (Workbase n.d.a). It provides assistance and advice on workplace literacy programmes, information and research on workforce literacy, support for literacy providers, and funding for businesses to investigate workplace literacy and/or set up programmes for workers.

28. Describing literacy using this approach would probably fall somewhere in the middle of the literacy continuum (see figure 2). At a functional level, they seek to measure the minimum skills required to do the job against an independent standard. At the same time they also note the importance of the local environment in influencing literacy, acknowledge that discussed literacy activities are only relevant within specific workplace contexts, and allow for multiple ways of looking at literacy.

29. The same rationale applies to the Central Kitchen, at least in theory. However, it needs to be noted that the Central Kitchen's highly standardised work processes result in less variance between the literacy requirements of each job. This process removes the need for literacy in many work tasks and artificially standardises literacy across the various jobs. Thus, the literacy required to participate in the Central Kitchen can be summarised as static, limited, repetitive, with reliance on oral communication and practical teaching. The lack of this process in the Print Shop makes it more difficult to summarise literacy.

30. Research by Comrie and Culligan (2006) into community views on literacy and employment in Wanganui shows that when prompted, people associate literacy as an essential employment skill, but are much less likely to mention literacy as an employment skill without prompting. They suggest people may take literacy skills for granted and fail to recognise the extent of literacy problems.

31. It should be noted that while prisoners may be able to gain access to the catering and printing industries without qualifications, the nature of the job they are likely to get in these industries without qualifications will generally not meet Harrison and Schehr's criteria (2004) for reducing recidivism (see note 15). See chapter 6 "Improving Education and Training for Employment" for a summary of Harrison and Schehr's work.

32. As well as the small sample size, the purpose of each CIE business, the nature of the hospitality and printing industries, and motivation of prisoners should be noted when considering these statistics. As Business Manager, John summarises: "Well it all depends what people are after and what sort of job you're after... It would be very rare to get any percentage of prisoners out the Central Kitchen to go into the hospitality industry outside. It's a fact of life. It's not because we can't train them, it's not because of anything we're doing. It's because they just don't want to do it. They don't want to be working unsociable hours… It's a fact of life. There is nothing you can do about it."

APPENDIX 1

33. In the mechanical schema people are subject to the laws of matter. In the physical sciences all things are made up of combinations of particles (MacMurray 1929). Various substances result simply from differences in the way particles are arranged, not in any innate difference between the particles themselves.

34. The main biological theory appropriated during this period was that organisms have both anatomical (matter, mechanical) and physiological (biological) aspects (MacMurray 1929). They are made up of organs, each of which performs a necessary function in the organism's existence (organs would not exist if they were unnecessary). These organs are designed to fulfil a unique purpose and the structure of the whole organism is determined by the nature of its organs.

35. At the social level, the personal refers to a unity of people or a community (MacMurray 1961, 1962). Communities are maintained by friendships or personal relationships (not structures or organisations). MacMurray (19961, 1962) distinguishes between communities and societies.

Communities are an association of people for friendship (i.e. personal) and societies are an association of people for the common purpose of an environment that allows survival (i.e. functional). He uses the term functional to encompass material and organic elements of social life. In societies, people are not naturally equal, but valued by their contribution to the common purpose. This contribution determines social organisation and social roles. People relate to each other by their social roles (e.g. doctor, shoemaker) and order is maintained by social mechanisms like culture, rules, discipline, duty, and obedience. Societies and communities are not mutually exclusive but interrelated fields. They both play an important role in the social world. MacMurray (1961, 1962) describes the relationship as the functional life being for the personal life and the personal life being through the functional life. He acknowledges that this ideal is difficult to achieve and that people and social life often operate solely in the functional field (1950).

36. MacMurray (1962) makes a distinction between knowledge and information. Information is understanding about something and is gained through functional investigation. Knowledge is understanding of something and is gained through personal investigation. One is not more valuable than the other; they are simply different.

37. MacMurray (1929) argues philosophical world views need to be robust enough to account for existence experienced in the social world. Robustness can be ascertained in practice. Theory that does not match practice needs to be revised.

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