COLLECTIVE CAPACITY: GROUP BASED RECOGNITION IN THE CONSTRUCTION INDUSTRY

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Abstract

The Australian construction industry has more than 35% of its workforce with no formal qualification (National Skills Commission. 2020). These workers' low income and limited career opportunities place them at risk of remaining indefinitely at a low socio-economic status, a risk exacerbated by the impending construction trade licensing scheme, which requires workers to have formal qualifications.

Buddlemyer et al. (2012) argue that a positive impact on social inclusion via education is the completion of a Certificate III qualification. This study explores a way in which these construction workers can achieve a Certificate III qualification through Recognition of Prior Learning (RPL).

RPL is a form of assessment to recognise skills and experiences of the workplace that contribute to the acquisition of formal qualifications. RPL has a limited range of assessment methodologies suitable for marginalised groups, rendering current RPL strategies unsatisfactory in achieving the desired outcomes for these groups.

As the building industry is a very collegiate environment with high unionisation and a group or team culture, an RPL system that incorporates this group/team culture may have a greater impact on encouraging non-qualified Building Industry employees to undertake the RPL process, and via a positive exposure to education, continue as lifelong learners with a potential increase in social inclusion.

This research aimed to identify whether a group RPL practice creates a social environment and framework where fellow candidates and an assessor collectively describe and validate knowledge and skills in a collegiate environment.

The research utilised a qualitative, mini-ethnographic case study approach. This design sought to understand a human phenomenon in its anthropological cultural context, within the boundary of a case study. This study undertook an in-depth investigation into group RPL practice with a construction industry cohort, in which participants reflected on their experiences in relation to RPL and group RPL.

Data was gathered from experienced assessors and RPL candidates in the construction industry via interviews and observational data on the interaction that occurs between assessors and candidates in a group RPL activity. The researcher's personal narrative provides a further reflective lens on the RPL process.

Analysis and thematic coding of the data was conducted utilising a combination of Interactive Visual Concordance, Sound Event Recognition, and Image Processing Analysis, contributing to the themes of assessor competence, candidate identity, the relationship between assessor and the candidate and the concept of group RPL.

This research identified influential features of the low/non-qualified construction cohort that informed the construction of a conceptual group RPL model and found that the candidates who undertook group based practical RPL assessment activities achieved a greater success rate than when RPL activities were conducted with individuals. Implementation of this model may create an engaging pathway for the identified cohort to gain certification and licensing.

This research provides a significant contribution to the field of vocational learning and RPL in the construction industry; it offers a group RPL model that may provide assessment and recognition for this socially disadvantaged cohort, leading to meaningful employment and greater social inclusion.

Prologue

My contextual Background

A background in the construction industry coupled with extensive experience in the vocational education sector provides me with a contextual set of lenses regarding this research. This multiplicity of experiential lenses in which to analyse problems, situations, and contexts, has guided me in this research and provides the reader with contextualisation and the ability to gauge the validity of my thinking, analysis, and directions.

My developed understanding of the construction industry and its nuances provide a valuable insight into the construction learner demographic, program analysis and design. Moreover, my educational management lens, drawing on 15 years in educational management, managing staff, budgets, business development, and operations in local, national, and international contexts, combined with my role as Chair, Victorian Building & Construction TAFE Managers Network from 2009 until the end of 2013, and my role as President of the International Society for Performance Improvement (ISPI), Melbourne Chapter for three years, all provide insights from an education management perspective at a meso level.

I drew on my extensive teaching practice, experience in educational design, and entry into educational research, to develop a program design for apprentices that integrated technology and industry, and allowed the students to create their learning content and assessment design. This reflected a learning architecture that adopts ubiquity and pervasiveness to support communities of learning practice (Carroll, 2010). The success of this framework led to my desire to research and develop an

RPL strategy that allows greater inclusion of knowledge within an inclusive environment.

A personal history of influential exampling from my father via an espoused belief and demonstration that people deserve equality and respect regardless of race, colour, employment, and stature. It is the opportunities that people are offered that create the opportunity for people to be capable.

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List of Abbreviations

ABS	Australian Bureau of Statistics
APEL	Accreditation of Prior and Experiential Learning
APL	Assessment of Prior Learning
ASQA	The Australian Skills Qualification Authority
BICCIAB	The Building Industry Consultative Committee and Industry Advisory Board
CBT	Competency Based Training
CEDEFOP	European Centre for the Development of Vocational Training
DELWP	Department of Environment, Land, Water and Planning
ECV	Erkennen Van Elders of informeel verworven competenties
GPA	Grade Point Average
HE	Higher Education
HRM	Human Resource Management
HVLP	High Volume Low Pressure
IPA	Image Process Analysis
ISPI	International Society of Performance Improvement
IVC	Interactive Visual Concordance
NSW	New South Wales
NZQA	New Zealand Qualifications Authority
OECD	Organisation for Economic Co-operation and Development
PLA	Prior Learning Assessment
PMP	Project Management Professional
RCC	Recognition of Current Competency
RDA	Reconnaissance De Acquis
RPL	Recognition of Prior Learning
RTO	Registered Training Organisation
SER	Sound Event Recognition
TAFE	Tertiary And Further Education
UNESCO	United Nations Educational Scientific and Cultural Organisation
VBA	Victorian Building Authority
VET	Vocational Education and Training
VPL	Validation of Prior Learning
WELL	Workplace English Language and Literacy

Doctor of Education Declaration

"I, *Rodger Wayne Carroll*, declare that the Doctor of Education thesis entitled *Collective Capacity; Group Based Recognition in the Construction Industry* is no more than 60,000 words including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work". "I have conducted my research in alignment with the Australian Code for the Responsible Conduct of Research and Victoria University's Higher Degree by Research Policy and Procedures.

Signature [redacted] Date 30/01/2023

"All research procedures reported in the thesis were approved by the Human Research Ethics Committee HRE16-272."

Signature: [redacted] Date 30/01/2023

I acknowledge Rosemary Viete's work in proofreading and copyediting my thesis in its final draft. She provided feedback regarding grammatical accuracy, correct use of spelling and punctuation, conformity with referencing conventions, clarity of expression and appropriate and consistent use of terms. In doing so she preserved my meaning, argument, style, organisation and voice. Although her former field is education with specialties in academic literacy and language testing, she did not furnish input that affected the substance and structure of my thesis.

Signature: [redacted] Date 30/01/2023

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I would like to express my sincere gratitude to my principal supervisor, Associate Professor Margaret Malloch, who has supported this part of my life in education. After transitioning from my career as a carpenter, to a career in education, Marg became instrumental throughout my Masters degree studies, and ultimately to arriving at the end of a Doctor of Education. Marg's enthusiasm for education is infectious and this is testament to her support and guidance.

To Dr Gabriella Pretto, who has co-supervised me in this process, I offer thanks for her provision of clear and concise feedback. It is all appreciated and understood that this comes from her caring and supportive being, in helping this journey to be successful.

I acknowledge Rosemary Viete's work in proofreading my thesis in its final draft. She provided grammatical and semantic feedback on the text, but preserved my meaning, argument, organisation, and voice. The proofreading also provided help in consistent use of the referencing conventions. Although her field is education, she did not furnish input that affected the substance and structure of my thesis.

Finally, I would like to thank my family and friends for their unconditional support and encouragement throughout this entire process. Any achievements in my life are due to their understanding, patience, and inspiration.

Chapter 1: Introduction

Introduction

This chapter introduces the reader to the contextual problematic and the literature utilised to guide the investigation design that led to the identification of solutions used in developing a Group RPL strategy. This strategy may allow greater inclusion of knowledge within an inclusive environment for the cohort of low or unqualified construction workers. The introduction of the group RPL concept with reference to literature creates a series of questions to be addressed in this research.

The Context

For the purpose of this research, the author will focus on the construction industry, where the need for accessible RPL practices is considered key to the future growth and economic prosperity of many employed within this industry, particularly considering the impending construction trade licensing scheme. The concept of a Group RPL practice may create greater engagement and success for the low/non-qualified construction worker.

This is extremely important in the Building Industry where 35% of employees have no formal qualification (Australian Bureau of Statistics [ABS], 2020). The National Skills Commission (2022) predicts that the building industry requires 66,400 new employees to enter the industry between now and 2026. These figures do not account for the average retirements from the industry.

The most common and predominant means of gaining a trade qualification is via the apprenticeship system. Apprenticeships are a work-based model of training that is recognised globally. It is believed that this model of training dates back to beyond the

18th century BC with writings discovered in Babylon revealing that craftsmen have a duty to train younger generations in their craft.

The modern apprenticeship methods in vocational education and training link institution-based training with the workplace. Working on real-work tasks in the workplace with other colleagues facilitates learning and immersion in an occupational social environment. The building industry is a very collegiate environment, resulting in a group or team culture. This is due to the large volume of labour required on many building projects. This occupational socialisation and development of work culture can be defined as the attainment of work-related values like reliability, ability to work under pressure and the team approach in the construction industry, which foster solidarity within the trade (Chankseliani et al., 2017).

An RPL system that embraces this culture may have a greater impact on encouraging non-qualified building industry employees to undertake an RPL process formalising their experience and thence through positive exposure to education to continue on as lifelong learners.

The Problematic Industry Context

The construction industry is facing a major shift with the introduction of a requirement for licensed qualifications for workers. The Victorian Government has been considering a trade licensing scheme for several years and now has set an implementation date of late-2022.

This trade licensing scheme will require people working as a carpenter, for example, to be qualified and licensed. The minimum requirement for being a licensed tradesperson will be the achievement of a Certificate III trade qualification. After the set implementation date, a non-licensed tradesperson will not be able to

undertake work on a building site in Victoria. It will be an offence to work unlicensed on a building site and it will be an offence for the owner or the builder to have an unlicensed tradesperson working on the site, unless they are in the process of gaining a trade qualification, such as an apprentice.

Whilst the construction industry employs 8.7% of the Australian workforce (National Skills Commission, 2022), in addition to the issue of upskilling at Certificate III level is the issue of the level of professionals employed in the industry, the proportion being currently at only nine per cent. In order to maintain competitiveness in a global market and to fulfil demand in Australia there is a distinct need to up-skill a larger portion of the existing workforce to a professional level (McLaughlin & Mills, 2012).

This impending government trade licensing scheme creates an urgent need for research such as this on group RPL practices for Certificate III level construction industry qualifications.

Recognition of Prior Learning

This research focuses on RPL practices for Certificate III level qualifications within the construction industry, an industry that has approximately 50% of its workforce qualified at a Certificate III level, with 12% at higher than a Certificate III, and more than 35% of its workforce with no formal qualification (ABS, 2020). It provides a significant contribution to not only the research field but potentially to the construction industry if it can help increase levels of formally qualified building workers.

RPL was initiated under the National Qualifications Framework by the Australian Government in 1993 following the implementation of RPL in the United Kingdom in the late 1980s and in several specific projects within Australia. This criterion-referenced assessment of knowledge that already exists in the candidate is used towards the achievement of a qualification (Wiliam & Thompson, 2007).

The qualification standards used in RPL are the same standards aligned to the teaching program and reflect a vernacular between employers, industry groups, advisory groups, and academia. This discussion sets agreed standards required for qualification accreditation and employment, largely based on employer need.

RPL is currently a linear framework of individual knowledge and skills assessment that parallels the current curricular and industry needs via a validation of knowledge gained from formalised learning, non–formal learning and the experiences of working life.

When applying for RPL, the institution will require the filling out of an application document to determine initial experiential alignment to the program, which refers to the type of experience and the timeframe of experience that is relevant to the qualification or subject/s for which RPL is requested. Post initial acceptance, an interview, in the location of the assessor, is commonly used to gain a greater understanding of the candidate's history and motivation for undertaking the RPL process, this is generally followed by the gathering of detailed examples of the candidate's work history and documentation, i.e., invoices, pay slips, site plans and instructions, photographs, and third-party evidence and testimonies such as employer references. The current process can be considered a knowledge-based criterion.

In current RPL practices it is the academic assessor who determines what knowledge counts towards the critical evidence criteria of the competency standards, the same competency standards that are based on industry practice and industry needs.

Due to the 'credit' model utilised in RPL practices the outcomes have become narrowed to a particular point in time and to a particular course description and require broadening to include the wider objectives of lifelong learning and not confining judgement exclusively to association with formal learning (Cameron & Miller, 2004).

In the aforementioned RPL processes, the employability skills that are embedded in competencies are either given minimal weighting in lieu of skills assessment, or recognition of them is non-existent in the assessment process. This may be due to an intrinsic ascribed value if the candidate is already working, or it may be due to the difficulties in assessment tools in identifying these skills.

Recognition of Prior Learning and Social Inclusion

Thirty-five percent of Australia's construction industry workforce have no formal qualifications (National Skills Commission, 2020), and are reported to experience the problems of low self-esteem and low socio-economic status of many people working in this industry. This is considered to contribute to an unacceptable suicide rate in the industry and an unacceptable level of drug usage in the industry (Heller et al., 2007; Lowe, 2021; Milner et al., 2017). Consequently, concerns arise as to how the trade licensing requirements will be implemented without further exacerbating the issue of social exclusion and mental health issues.

The risk from social exclusion is that it is an influential factor in suicide mortality (Yur'yev et al., 2011). In 2017, suicide was the leading cause of death among men

aged between 15 and 44 years (Australian Bureau of Statistics [ABS], 2017). Currently 6.86 males between the age of 18 and 44 commit suicide per day in Australia, with approximately 25% of these from the building and construction industry.

Approximately 10% of Australia's 20 to 64-year-old population is in the category of social exclusion, meaning that a lack of qualifications may limit their access to job opportunities because of the impending Victorian Government Trade Licensing laws and increasing demand for workers with higher skills levels and capacity to contribute to the deepening skills base (Thompson, 2008). Recognising this cohort's strengths through a recognition of prior learning (RPL) process at a Certificate III qualification level may provide them with the confidence to re-engage with education and have the effect of reducing their social exclusion by 30% (Buddelmyer et al., 2012).

It also provides the possibility of workers having their experience recognised for gaining a Certificate III qualification and to be able to continue in the industry.

Drawing upon Buddelmyer et al's (2012) research suggesting that the biggest impact on social inclusion, through education, is expected from the completion of a Certificate level III qualification. Similarly, when viewed through a Foucauldian lens (Andersson, P. 2008), a government position on the current RPL policy and practice is that it is inherently good and unproblematic. Recognition of Prior Learning is identified as a good policy and there is evidence of good practice, however the current policy and practice may strategically fail in engaging some people from the construction industry to re-enter the education environment (Masschelein, et al., 2007).

This position may be due to the massifying of policy and practice from a political context focusing on mass production rather than individualisation. RPL has had at best

only a four percent uptake and remains in the peculiar position of being pervasive in policy yet disregarded as educational practice (Smith, 2008).

Recognition of Prior Learning language

Through an analysis of documents and discussions to date, the prevalence of Vocational Education and Training speak—the language of the assessor—is evident, mirroring the training package terminology and policy language (Conrad, 2010). This terminology is a product of many years immersed in a formalised education and training environment and has little meaning to a person of differing background and knowledge.

This default language of the policy document and the training package, describes the competencies and the elements within those competencies that determine candidates' entitlement to the qualification.

The language adopted becomes a mythicisation of RPL for the candidate based on the dominant discourse of the assessor (Freire, 1972; Hamer, 2010). It is important to realise that the candidate's literacy is not under question; it is the skills required to operate in the industry that are being assessed. If this is not considered, further alienation may occur for the candidate.

Assessor-Candidate Relationship

In a paper from Australia, Hamer (2010) questions RPL as a normative assessment or a co-construction of preferred identities. The question of power operates in the assessor–candidate relationship via the role the assessor has in ascribing meaning to the candidate's experience and the translation of this into a competency that can be

credentialed. This is seen as matching the candidate to norms set by a dominant culture, similar to the issues that Freire (1972) explains as oppressive and which Biesta and Leary (2012) characterise in the equation emancipation = conformity.

In response to this situation, Hamer (2010) introduces a conversational model with discussion about collective and individual identities where the candidate has agency in shaping meaning, providing an opportunity for the candidate to re-construct themselves via their own story of experience. This, she maintains, borders on "therapeutic" and is a suitable alternative to the bureaucratic requirements of evidence collection, although she explains that the disposition of the assessor may be a major factor in this process.

In all cases the worth of the candidate's knowledge is subject to the determination of the assessor, who may have a vastly differing construct from the candidate and even from the current practice in the industry for which assessment is being sought. There is evidence that some institutions do not value RPL because of the lack of payment to the selected assessor, who has to carry this task out amongst all of the other responsibilities they have within the organisation. This lack of academic recognition of an RPL assessment creates a responsive lack of value for RPL among the academic staff, therefore differentiating RPL assessment from traditional educative work.

Research Aim

This research aims to investigate the notion of group RPL practice in the Australian construction industry where fellow candidates assist each other through the collective knowledge and experience of the group, thereby creating an engaging experience for the candidates and greater success in the recognition of knowledge and skills.

This can become an RPL framework which enriches what has been a one-way knowledge and skills assessment, and which parallels the current curricular and industry needs. Equally importantly, it offers a pedagogical framework for adult learners that creates opportunities to embed not only employability skills but principles of lifelong learning, allowing further pathways and opportunities to not only the individuals but the groups they belong to, however indirectly.

Conclusion and Research Questions

The RPL process should not be only about recognising how the candidate fits the qualification requirements. It is also important to identify how RPL could be an evaluation of what people can do and have the potential to do, utilising academic/ pedagogical/ andragogical experience to map into the qualification requirements. The academic role is to determine the best pathway available to achieve their assessment goal as the candidate may quite possibly be confused by the terminology and jargon that sit within the educational environment and the qualification descriptors.

If we design an RPL program that is aligned to the homogenous subculture of the low/non-qualified construction worker, we are merely submitting this worker to a system of governmentality (Masschelein, et al., 2007). This accentuates the propensity to change social and political problems into education problems and therefore into issues that need to be resolved by individual beings and their learning, rather than through communal and organisational or governmental approaches. In this environment of politics and employment, Emancipation does indeed equal Conformity (Biesta, 2012a).

The risk of social exclusion is that it is an influential factor in suicide mortality. Suicide behaviour derives from an interaction of psychological, biological and social factors, the latter having a significant impact and harmful impact on mental disorders. (Yur'yev et al., 2011). Yur'yev et al. (2011) found that both economic/unemployment and dimensions of social exclusion significantly influence suicide among males. This is similar to a Japanese study that found suicide is less related to unemployment with an individual, but the situational change from employment to unemployment for the individual. The study speculated that men's thoughts of work are traditionally different from those of women, with the risk factor of unemployment, in relation to male suicide, being the greatest indicator at 23.1%, while in females it is only 5.7% (Inoue, et al., 2007).

In order to engage in lifelong learning and RPL, the individual is required to believe they are a learner, that they require further knowledge to sustain a productive future for themselves. Using this logic in understanding and accepting they are learners and in constant need of learning is only applicable to those who accept it. In an industry that has a high suicide rate, predominantly among low skilled and socially excluded people, logical thoughts may be inaccessible for the individual, replaced by the concept of suicide as the only answer to their troubles becomes the logic. On this premise, the thought of entering education is not considered. The influence of stoicism as a barrier to seeking help in this traditionally masculine building and construction environment also becomes prevalent (Milner et al., 2008).

The development of an RPL environment considerate of the industry culture may address the identified issues presented above.

This research aimed to make a significant contribution to the construction industry and its workers.

The investigation for this research was guided by the following research questions:

- What is the current best practice of RPL activities?
- What are the current issues with RPL in the construction industry?
- How could a group-based approach provide construction workers with qualifications?
- How could a group RPL process be successfully implemented in the Australian construction industry?
- To what extent would a group-based approach engage construction workers to take part in the RPL process?

It is hoped that the outcomes of this research will have a positive impact on the industry and society. The next chapter explores the literature related to RPL and contextual and procedural matters affecting its use.

Chapter 2: Literature Review

Introduction

This chapter reviews literature presenting key information regarding the macro, meso, and micro implementations of RPL both internationally and locally. The research undertook a broad review of RPL publications, and as information had become available, the scope of the review was expanded to the identified topic. In reading RPL research, many authors will discuss social justice in regard to RPL, and this drove a broader search for publications focusing on social justice and emancipation. This strategy applied to other key elements identified in the initial literature reviewed, for example the topic of assessor thinking, and behaviour led to publications regarding autopoiesis and a self-producing society. The relevant literature led to key questions to be addressed within the scope and time frame of the project, with literature that was identified during the data collection, analysis and discussion being presented in the findings and conclusion.

Background

There is little publicised that presents information about engaging non/low qualified people in education, in order to undertake a pathway into Vocational Education and Training (VET) and possibly to Higher Education (HE). This is a major barrier in the construction industry, with over 35% of the workforce holding low or no qualifications. This situation has prompted the presentation of research into effective means of engaging and/or re-engaging construction workers in education. In a statistical analysis conducted by the University of Western Sydney, the Grade Point Average (GPA) of students who took a pathway from VET into the Bachelor of

Construction Management was marginally higher than for any other cohort (McLaughlin & Mills, 2012), and this provides evidence regarding the value of non-qualified construction workers engaging in education and lifelong learning.

The rhetoric surrounding RPL practice in 1994 presented a promise of a potential of encouragement to disadvantaged and marginalised cohorts to transition from informal to formalised education (Cameron & Miller, 2004), by having their knowledge and skills recognised, regardless of the formality or informality of their acquisition.

The cornerstone of lifelong learning in developed countries is the recognition of prior learning, however many institutions place barriers limiting the development of RPL practices. This is validated by the under-representation of RPL in these organisations and the preference for credit transfer in lieu of learning gained outside the formal arena. Nevertheless, there has been a significant acceptance, in a short time frame, enabling historical barriers to RPL to be re-examined in educational institutions that have a strong adult learning and Vocational Education and Training (VET) culture. Such institutions are more likely to apply applicant friendly RPL processes that embrace professional treatment and sound communication (Conrad, 2010; Pitman, 2009).

This can result in a positive RPL process that can increase the confidence of the candidate and promote a positive perception of learning that encourages the candidate to examine their behaviours and the behaviours of others, leading to lifelong learning (McKenna & Mitchell, 2006; Whittaker, 2008).

One of the keys to a positive RPL process is that the vocational assessment language is demystified, allowing the candidate to identify how their everyday experience can align with a qualification standard.

Having the self-confidence, a vocabulary of vocational language and being able to align one's knowledge with the requested competency is a pre-requisite for success in an RPL process. This pre-requisite often excludes the very cohorts RPL was meant to assist back into education and social inclusion (Hamer, 2010).

There can be a gatekeeper effect in educational organisations to preserve the integrity of the qualification via a lack of recognition of alternative skills and knowledge. The lack of varied assessment methodologies capable of appropriately gauging the knowledge and skills of marginalised groups, renders current RPL strategies unsatisfactory in achieving the desired outcomes for these identified groups (Hamer, 2010, 2011).

This is evident in our Indigenous population, who attain approximately 50% successful RPL (Cameron & Miller, 2004) aligning them with the non-English speaking background cohort and creating a dichotomy between an RPL policy designed to be a mechanism for social inclusion and the actualities of the RPL processes currently utilised. It is, however, interesting to note that people with a disability received higher levels of RPL than people without a disability. This similarly applies to Regional and Metropolitan students where regional students are afforded greater levels of RPL.

In relation to mature male workers, as part of the 35% non-qualified workforce in the construction industry, many have low self-esteem and a lack of confidence and could be nervous and hesitant to enter into a formal training environment (Cameron, 2004). Mature females have far more engagement with RPL, representing 100 to 800 percent more than their male counterparts. This raises some significant questions concerning the low level of participation in mature males (Cameron, 2004).

It is interesting to find data on RPL procedures and the volume of RPL usage, however very little data appears on the embodied practice of RPL, thus limiting the influence of theoretical investigation that might inform our understanding. The less than theorised nature of RPL and the process at which knowledge is given value requires further investigation.

History of RPL, A Global Perspective

The G.I Bill 1946 in America was implemented post World War Two as a strategy to encourage returning soldiers to re-enter education via a series of short tests and aptitude assessments to determine credit into education. This presents as the initial origin of recognition of prior learning practices (Doddrell, 2002).

The term, prior learning assessment (PLA) emerged in the USA during the 1960s and continues in its present form. In the 1980s, this process of recognising prior learning was taken to Britain and introduced via an American experiential learning program, which was eventually modified to maintain confidence in the framework being developed in Britain with the resultant terminology being Accreditation of Prior Learning (APL), (Doddrell, 2002).

This means of recognising people's knowledge and skills, spread to Canada, South Africa, Europe, and Nordic countries by the mid-1990s along with the drive to further develop practices regarding the recognition of prior learning (Conrad, 2010).

The policy concept of recognition of prior learning emerged many years ago in Europe and beyond; this was driven by the European Union. The concept was about the recognition of prior learning, regardless of where the learning has taken place

(Conrad, 2010). The process makes visible non-formal and informal learning and provides recognition for this learning.

The acceptance of this learning, via the recognition of prior learning process, can include acceptance of credits for advanced standing integrated into a particular course. This recognition may, in some circumstances, be equivalent to a whole qualification. This is more predominant in the vocational sector (Conrad, 2010).

There is a global range of terminology regarding the concept of recognition of prior learning, with RPL termed in various ways, including APEL (accreditation of prior and experiential learning, APL (assessment of prior learning), RDA (reconnaissance de acquis), ECV (erkennen van de Eerder Verworven Competencies), VPL, (validation of prior learning), PLA (prior learning assessment) and PLAR (prior learning assessment and recognition) (Conrad, 2010).

The variation of title terminology utilised in recognition of prior learning does not alter the fact that the meanings and use are shared in common.

RPL was born out of the concept of lifelong learning, with a focus on learning rather than a focus on education, and thus it emphasises the ubiquitous way in which the adult learner may attain this learning. Rubinson (2004) sees personal development being individuals' responsibility to make themselves, in lieu of being made.

Faure et al (1972) published a UNESCO report titled *Learning to be*, which was viewed as a positive, humanistic definition of education and the progress of personal development. Faure viewed lifelong education and personal development as good for

society with an emancipatory effect by enabling people the opportunity to control and adapt for greater social inclusion and work opportunities.

This concept spread to other countries. For example, prior learning assessment (PLA) was introduced in the United States of America in 1996 and was intended to be an opportunity for people to access higher education who previously had not had the opportunity to do so. This was driven by a social justice rationale as was the case in the UNESCO report about enabling people to have such an opportunity (Faure,1972).

Literature identifies the issues of social justice as the emergent central driver for the implementation of recognition of prior learning. This also influenced the predominant stance in recognition of prior learning research.

A shift, however, occurred somewhere between the 1980s and 1990s from the social focus toward an economic development focus and lifelong learning policies were driven by an economic discourse of employability and economic growth (Anderson & Fejes, 2008).

Fejes (2010, 2014) explains that this strategy was designed for people to take responsibility for their own learning to increase their own employability. Fejes utilises a Foucauldian lens in interpreting government policy and analysing text to determine the power structures, hierarchy, oppression, lack of meaning, and contradictions. “Where adult education and learning is dominantly considered to signify freedom from power through self-autonomy and critique, Foucault helps us to ‘read’ it alternatively as a mechanism of power whereby the individual governs himself or herself within the relations of power” (Fejes, 2014, pp113, p1).

This shift from social justice to an economic outcome was driven by the concept to effectively use existing vocational competence in the labour market and became the driver for the development of qualification frameworks such as the Australian qualification framework, which delivered a competency framework in which the recognition of prior learning and assessment were embedded.

The concept of educational frameworks was described in the European Commission strategy in 2009, entitled Strategic Framework for European Cooperation in Education and Training. It outlined a lifelong learning strategy that integrated work and education as a learning process. This became a strategy that was inclusive of not only an economic discourse but also the humanistic discourse (Anderson, Fejes, & Sandberg, 2013) in that it espouses democratic, social and citizenship values, yet is guided by a focus on sustainable economic prosperity and employability.

The European Commission strategy was directed toward the validation and professional fulfilment of people. This element of validation is directed at non-formal and informal learning in implementing lifelong learning strategies and drives the shift from a focus on education to a focus on the learning (Anderson, Fejes, & Sandberg, 2013).

The European Commission strategy saw learning through participation in the workplace, in family time, and recreational activities, as valuable. Exploring the knowledge the individual has gained whilst in work and society and family, and validating such knowledge, is proposed to be a solution to low economic development and unemployability (Andersson & Fejes, 2005).

Social and educational developments have outweighed slowly developing theories of recognition of prior learning (Andersson, 2008). With the current opportunities for the recognition of prior learning to play an important part in some cohorts' lives, the analysis and research into the recognition of prior learning can help in solving these social issues.

Between the intentions of recognition of prior learning and the practice of recognition of prior learning is a gap due to the evolution of recognition of prior learning from a humanistic strategy to an economic strategy. This has resulted in the inaction of the social justice intention of transformational policy being enacted in recognition of prior learning practice (Prinsloo, 2009).

The policy drivers for the recognition of prior learning may variously include emancipation, labour market, and economic goals. The economic drivers and the social drivers can be attributed respectively to a neoliberal, skills-based mindset, or a socialist and emancipatory mindset.

When looking at the source of research, recommendations, and policy drivers, one can logically identify the intended outcome of the recognition of prior learning practice; for example, the World Bank report on the recognition of non-formal and informal learning in regard to a global knowledge economy (World Bank, 2003) is clearly driven by economic drivers. Another example is set around skills shortages and qualifications deficits, a neoliberal trait in social theory (European Centre for the Development of Vocational Training [CEDEFOP], 2009). And UNESCO's discussion of the recognition of prior learning is an example of a socialist and emancipatory policy recommendation for the implementation of recognition of prior learning in the process of creating greater employment, creating jobs and reducing

poverty (United Nations Educational Scientific and Cultural Organisation [UNESCO], 2012).

The names of the organisations in the examples above provide the social direction in policy recommendations; we can see the neo-liberal, economy driven from The World Bank, and CEDEFOP, the Organisation for Economic Co-operation and Development (OECD), all supporting economies of countries, and as the name implies, UNESCO has a more social, emancipatory lens on policy development.

In South Africa, recognition of prior learning was introduced in the early 1990s by the Congress of South African Trade Unions, to provide recognition of prior learning to address the inequalities of apartheid and to create pathways for the historically marginalised groups. This initiative lost momentum during the 2000s, though it has since increased in value due to educational institutions reforming their approach to recognition of prior learning (Makole, 2010). This continued alignment with the principles of lifelong learning as a means to improve and develop skills, continuously supports economic strategies while being supported by the South African education sector (Makole, 2010).

Massification of RPL

Doutor and Lucio-Villegas (2014) believe the three key ideas – dialogue, cognitive work, and experience, help us define our concept of adult education beyond the restrictions of lifelong learning practices based on qualifications and diplomas.

The national system of recognition of prior learning in Portugal created in 2001 the general assumption that adults learn through different formal and informal contexts and experiences. It was designed generally for people who had bad experiences with

the formal education system and had left school for several reasons, some being economic reasons, gender inequalities, living in rural areas with low employment, and having low self-esteem. Built on the concepts of Freire (1972) and Vygotsky (1978), who see education as being an event where people are creating knowledge and conceptual skills, and where thoughts are first social and then individual, this RPL system was planned to be a gateway to a minority of adult Portuguese aimed at arousing the curiosity and pleasure of learning of these adults (Doutor, & Lucio-Villegas, 2014). During the chronological time frame of their research, the authors (Doutor, & Lucio-Villegas, 2014) reported that the RPL system had massified with approximately 90 RPL centres across Portugal.

RPL was seen in Portugal as part of the wider adult education sub-system, however the new government elected in 2005 introduced the new opportunities program, characterising lifelong learning as central in the field of adult education. This introduction of lifelong learning is intended to train adults to the labour market. As the scale and mass of recognition of prior learning had increased over the years it was viewed through a political lens and it was determined that the process risked social credibility via excessive practices. This led to the RPL centres closing in March 2013 and being replaced with centres of education and professional qualification (Doutor, & Lucio-Villegas, 2014).

History of RPL, An Australian Perspective

It is interesting that after the initial use of the concept of prior learning recognition in Australia post-World War II, in recognising immigrant's skills and knowledge that they bring to Australia, there was a large chronological gap from then, to the reintroduction of RPL, because of labour market reforms. The need to reassess for job classifications and award restructuring became a driver to recognise the learning

and training acquired on the job. In 1989, the Broadmeadows TAFE project with the car manufacturer Ford became a solid implementation of a structured recognition of prior learning in Australia (Doddrell, 2002).

In 1990 an ABC radio program that presented RPL as a means by which people could be recognised for their non-formal learning received more calls from the public on this topic than any other topic it had presented that year (Smith, 2008). Since its inception, many organisations have shown enthusiasm regarding RPL. In its early stages one already mentioned example occurred in a partnership between the Ford Motor Company and Broadmeadows TAFE where industry training and experience were integrated into qualifications underpinned by four principles: commitment, fairness, access and support (Smith, 2008).

In 1992 the National Framework for Recognition of Training instigated the concept of competences and embedded RPL in the emerging competency schema (Smith, 2008). It is this process that may have reduced the positive impact of RPL via its links with competency standards rather than with an overall task, creating a complex myriad of individual competencies and the regulatory requirements of mapping gained industry knowledge onto these competencies. This de-clustering of skills continues to create an unfriendly and unfamiliar environment for the RPL candidate and may provide a reason to defer from these activities.

The Competency Schema

The Australian Skills Quality Authority [ASQA] (2015), describe competency-based training (CBT) and assessment as the attainment and demonstration of skills aligned to defined industry standards.

The assessment component of CBT utilises a criterion referenced process of aligning people's skills and knowledge against these industry standards. This criteria in a training package, CBT environment is termed the performance criteria, sitting in the elements of competency, the cluster of attributed industry requirements that make up the competency.

In a competency-based assessment methodology, assessments must be designed to the regulatory standards and expected good practice described in the standards for training package guidelines (ASQA, 2015).

The first regulatory standard applies to the principles of assessment with a requirement that the assessments are Valid, Reliable, Flexible, and Fair. The second requirement is regarding the rules of evidence, and that the collected evidence, in the appropriate designed assessment tool is Valid, Sufficient, Authentic, and Current, to satisfy the performance criteria of the competency. This evidence can be direct, indirect, or third-party evidence (ASQA, 2015).

If the competency cluster performance criteria are not considerate of the human complexities and diversities that exist in the targeted workforce, then discrimination may be an indirect outcome via the lack of recognition of alternative knowledge and skills (Simms, 2005., Hamer, 2011).

Implementing CBT as a social practice recognises the diversity in application of CBT assessment and acknowledges knowledge and skills in an occupational practice environment in lieu of skills and knowledge independent of the practice. This practicing environment encompasses all of the nuances of the occupation inclusive of the social edifices (Hodge, Mavin, and Kearns, 2019).

This implementation of CBT informed by a social practice theory in this research may help to address the identified issues associated with the cohort. Success of this

type of implementation has been seen in the "Acknowledging Māori" initiative in a successful New Zealand Program (Kerr, 2017).

This can create an individualistic, positivistic, criterion referenced range of assessments employing a view of transformative learning theory into the RPL assessments and thereby create an increase in social standing and a reintegration into society for the identified cohort (Hodge, 2011).

Australian Government Policy on RPL

The Australian Skills Qualification Authority [ASQA] (2015) have a clear policy on the offering of Recognition of Prior Learning as an element in the standards for registered training organisations:

> Under the *Standards for Registered Training Organisations (RTOs) 2015*, your RTO must offer recognition of prior learning (RPL) to individual learners—unless the requirements of the training package or licensing requirements prevent this.
>
> Offering RPL ensures the learner has the opportunity to participate in assessment that is flexible and fair. Where units, and assessments, have been clustered:
>
> - In developing the assessment tools, your RTO should have a mechanism for ensuring all requirements of each unit of competency are addressed—for example, a mapping process. An RTO could use this mechanism to identify which components of an assessment have been addressed by

awarding RPL for a unit, and which tasks are still required to be completed.

It is possible the units have been clustered because of their similarities. A student may be able to demonstrate competency by RPL for all units in the cluster. (ASQA, 2015). This can be helpful as it encourages meaningful and coherent activities for the candidate while focusing on the mapping of skills rather than the activity itself.

The current Architectures of RPL

Paulos (2014) states that we are in a work environment of certification, where to remain competitive in the workplace we must prove training, with the implication that training equals more competence. This view is a common vernacular in our society espoused by teachers, trainers on the importance of education right through to employment agencies and our politicians.

Adult education has evolved in line with human society but also the economic and political frameworks. As countries develop their national education policies and guidelines the resulting common actions have created a consolidation of education and institutionalisation (Paulos, 2014). This reordering of education policies in a utilitarian model creates a model of education and training policies at the national level (Paulos, 2014). These education and training policies incorporated advice on promoting competitiveness in the European economy. The European Commission published a memorandum on lifelong learning in October 2000. This concept introduced changes in the way of viewing education, recognising different forms of knowledge such as formal, non-formal and informal.

In the process of education, the individual learns and develops the ability to do activities/tasks. As a result of their abilities in this area of activity they acquire a qualification, and this qualification places them into a social, professional and political domain. This in turn enables the individual to be independent, subjects of responsibility and action. Biesta (2012b) considers that qualification and socialisation promote the empowerment of individuals while subjectification is interrelated to emancipation, promoting critical thinking about ways of doing and being. This is what Biesta (2012b) terms the three domains of education.

An element of the lifelong learning strategy is recognition and validation of normal formal and informal learning and therefore embedding RPL in learning (and vice versa) is a critical aspect of the lifelong learning framework (Paulos, 2014).

The national system of recognition of prior learning in Portugal was created in 2001. The general assumption was that adults learn through different normal formal and informal contexts and experiences. It was designed generally for people who had bad experiences with the formal education system and had left school for several reasons some being economic reasons, gender inequalities in rural areas with low employment and people with low self-esteem (Doutor & Lucio-Villegas, 2014).

The framework of skills and competencies lacked a vision for adult education as noted by Freire (1987) and left out the means to raise autonomy and social consciousness in providing the adult with conscientisation. The concern of adult educators in assisting adults in finishing their educational process aligns with an emphasis on the standardisation of work processes to the detriment of ethical and political dimensions. This concern characterised educational policies, leading to adult educators preparing adults for a life path of increasing qualifications and competitiveness. When we align this with the three domains of education (Biesta,

2012b), only the qualification becomes a discourse of the adult educator, leaving the other two domains invisible.

This has become even more relevant given the agenda the National Framework for Recognition of Training instigated, embedding RPL in the competency schema (Smith, 2008), and the focus of Government on compliance in the regulatory system imposed on Training providers (McLaughlin & Mills, 2012). This has led to teachers being driven to paranoia about the records they keep, and the completely inordinate amount of time focused on documentation with little spent on pedagogical processes, resulting in the process of RPL linking with competency standards rather than an overall task, creating a complex array of myriad individual competencies and the regulatory requirements of mapping gained industry knowledge into these competencies. This disassembly of skills has created an unfriendly and unfamiliar environment for the RPL candidate and, indeed, for industry.

Cameron and Miller (2004) do not imply the current policy is misguided; they take quite the opposite view. The policies are well designed and possess a social justice rhetoric which caters for the diverse groups that would benefit from a sound RPL activity and would lead to the realisation of the policy's intended outcomes.

The lack of research-based modelling has created difficulties in the determination and appropriateness of experiential learning aligning to current RPL strategies. There is an alleged low status of RPL in universities due to its competency background, and greater development of procedures that are required (Taylor & Clemans, 2000).

The Negative Elements Presenting from the Literature

Taylor and Clemans (2000) found that RPL was not as valued as it might have been because the learning process was not observable in regard to what counts as

worthwhile knowledge appropriate to the demands of the program and the qualification. This also aligns to the alleged low status of RPL in higher education in universities, due to its competency-based background (Taylor, & Clemans, 2000).

Taylor and Clemens (2000) and Collins (2011) identify that staff display hostility to the concept of student learning outside of the formal environment although staff were accepting of the principles of RPL. This purely policy-oriented outlook creates an inappropriate RPL environment for the student and creates a gatekeeper effect in the attitude of the assessor. A gatekeeping mechanism is there to ensure the candidate earns the privilege of academia (Hamer, 2010, 2011), which may not be the objective of the candidate.

The translation of a candidate's experiences by an assessor, who simply ascribes meaning in alignment with competencies, perpetuates a dominant discourse rendering the candidate powerless and may undermine the candidate's self-worth (Hamer, 2010, 2011).

Through an analysis of documents and discussions to date, it is evident that the prevalence of Vocational Education and Training speak—the language of the assessor—is a mirror of the training package terminology and policy language (Hamer, 2010; Taylor, & Clemans, 2000; McLaughlin & Mills, 2012). This terminology is a product of many years immersed in a formalised educational environment and has little meaning to a person of differing background and construct. Instead of using the language of the environment, which the candidate would have been exposed to, the default is to use the language of the policy document, the training package, which describes the competencies and the elements

within those competencies that determine qualification entitlement for the successful candidates.

The language also mirrors the common vernacular of the Vocational Education environment.

The language adopted serves to disempower the candidate with many unqualified people within the building industry operating at a lower-than-average literacy level. This is evidenced by the Workplace English Language and Literacy (WELL) programs that are available and sponsored by the industry peak bodies such as the Construction and Property Services Industry Skills Council (CPSISC). If the candidate possesses a lower level of language and literacy, the assessment process of filling out a form that requires the candidate to find and determine the competencies and elements that his/her self-identified knowledge would fit, and then to write their story in the way expected by the assessor, would result in failure for many. This can be attributed to the mythicisation of the world (as one where there is only one way of seeing the world) by the assessor and the dominant discourse of the assessor (Freire, 1972; Hamer, 2010).

Discussion as to why the adoption of educational terminology has become a default is identified as being driven by an audit rationale. Public Registered Training Organisations (Public RTOs) face constant audit processes in relation to the enrolment, training, and assessment of the learners at any given point of time with clear penalties for noncompliance. These measures are based on administrative processes regarding the candidate or learner throughout the whole scenario of enrolment, training, and assessment.

As a preponderance of Government funds for training and assessment purposes is utilised by Public RTOs they therefore come under scrutiny of audit. This audit originates, however, from an administrative context, rendering the educational rationale invisible. This lack of dialogue and adhesion to processes that, in the majority, satisfy an audit process may render the candidate marginalised, with many of their skills unrecognisable or even invisible due to the language barriers placed in front of them.

Anderson and Fejes (2005) also find that the RPL discourse is something the candidate needs to learn in lieu of RPL actually acknowledging what they already know. The authors argue that this is due to assessment practices that identify knowledge as gained though formal education, as identified earlier in this section, with RPL assessments aligned to the current learning and assessment programs and not necessarily to the authentic activities of the workplace, or the language of the workplace.

The current RPL system could be viewed as a closed loop system requiring the candidate to agree to the rules of entry and process and to provide information allowing the candidate an opportunity to match the descriptors in determining an entry point. In this way, RPL is used as a filter for a closed loop system. This dehumanises the candidate who is forced to provide mechanistic responses to the assessor's knowledge indicators in language that is alien to the candidate's language of practice. This also occurs within the assessor's domain, a domain that may feel unfamiliar to the candidate. This process is termed assimilation (Atherton, 2011), where the candidate must present as something familiar to the assessor.

When the assessor and candidate use dialogue to exteriorise their worlds, they decode the concrete, moving to abstraction and back to the concrete. This analysis and description of the concrete situation can identify the limit boundaries where being equals being more, or knowing more. This is similar to Vygotsky's interpretation of the zone of proximal development and scaffolding (Kozulin, et al., 2003). Such a model founded on dialogue has the potential to tap the real skills and knowledge of the candidate and to help the candidate see what further direction in learning they need to take.

When assessing specific individual competence, the Swedish model also questions what knowledge is construed as valuable. It is often determined that experience and knowledge have to come from the 'right' area. The effects of governance in determining right and valuable knowledge can require the candidate to mimic the shape of the 'norm' as determined by the assessor. The paper by Anderson and Fejes (2005) classes this as a reactive assessment and introduces an alternative proactive assessment where the inclusion of strategy and adaption occur through a largely discursive environment where the candidate is also assessed against future learning (Anderson & Fejes, 2005), again similar to identifying a zone of proximal development (Vygotsky, 1978).

Within a dialogue the assessor can utilise prompts and hints in order to scaffold the recollection and organisation of memories. Building connections between present abilities and new skills utilising the current constructs of the candidate, the current knowledge becomes clearer, and can be expressed with a refined sequencing and re-presentation given the candidate now knows what they know. This acute awareness of surroundings and performance provides the assessor with a context in identifying actual and potential skills and knowledge (Miller, 2011).

It is important to utilise a dyad that draws on the process of remembering, to extend the candidate's mind beyond their own self-imposed limitations, to access the inner, private speech. We often do not know what we do not know. Many people call their skills and knowledge instinct or intuition, a non-conscious response to an event, action or situation. However, this may be the result of an instantaneous subconscious analysis and re-presentation or transverse application of knowledge the candidate did not consciously know existed in them and therefore is unable to verbalise in conscious speech.

Dialogue therefore becomes a critical aspect of RPL and the work of Freire (1972) can be used to explain the dialogic issues found in socially sterile RPL practices.

Cameron and Miller (2004) investigated an Australian perspective of RPL and formed a consensus that there is a void between the promise and rhetoric of RPL practice. They found candidates of non-English speaking background were less likely to receive RPL in comparison to those of English-speaking backgrounds and determined that RPL works best for those who have experience and success in post-secondary training and are familiar with the discourse and systems associated with formal learning. This confirms the language barrier as discussed previously in this chapter.

The study reports on a government report which identifies the barriers to RPL as the processes being too complex, the confusing language, the inadequate support and the issues of awareness and perception. It was also found that members of equity groups take up training as an option due to the social benefits of group learning in a supportive group environment.

Having the self-confidence, a vocabulary of vocational language and being able to align your knowledge to the requested competency is a pre-requisite for success in an RPL process. This pre-requisite then excludes the very cohorts RPL was meant to assist back into education and social inclusion (Hamer, 2010).

The studies and literature discussed above provide support for the creation of group RPL practices, the social context of inclusion as a driver for RPL.

The Positive Elements Presenting from the Literature

Successful RPL learners attain accelerated pathways to qualification, combined with augmentation of their confidence and self-esteem. This places RPL as a beneficial practice challenging the academic stranglehold of what constitutes knowledge while addressing equity and embodying emancipatory social justice (Hamer, 2010).

A positive RPL process encourages the candidate to reflect on not only themselves but others in their world. This development of a reflective and analytical approach can foster and establish lifelong learning (Whittaker, 2008). This process also allows the candidate to identify how their everyday experience can align with a qualification standard, provided that the vocational assessment language is demystified

Harris (1999) explains the discourse between knowledge and experience and how this would fit within the broadness of Australian qualifications and allow the candidate to draw and redraw on any experience, creating a reflective, cognitively aware individual. This interpolation of knowledge and experience may very well lie within a realm where a group of learners create their own curricula, inclusive of

social, collaborative, and collective knowledge and experience and in the process develop their analytical skills.

Whittaker (2008) and McKenna and Mitchell (2006), agree that a positive RPL process can increase the motivation and confidence in the candidate while promoting a positive perception of learning and an understanding of how to think and write reflectively, a skill that will enhance lifelong learning. This positive RPL process encourages the candidate to examine the behaviours and assumptions not only regarding themselves but others in their world. This can also be an effective tool to refresh practice via the development of an analytical, reflective approach that supports and promotes lifelong learning (Whittaker, 2008).

Perry (2009) presents challenge tests as an alternative assessment strategy; however, these can end up being simply another standardised individual assessment activity. Prior to the challenge test the candidate populates, either electronically or through hard copy, a document allowing the assessor to determine suitability for competency assessment. There seems to be little consideration for any language or literacy abilities although Perry recognises that there should not be only one RPL process mandated. Perry (2009) presents a bias towards utilising online communications (the author is heavily involved in the Flexible Learning Framework) and there is no mention of marginalised groups nor assessor competence.

Jacobs (2018) indicates that RPL is a pedagogical process comprising translational activities of non-formal and informal bodies of knowledge to align with the equivalent formal and structured knowledge of specified competencies. The identified difficulties and the greatest challenge to recognition of prior learning activities is making the rules of compliance that are based around traditional face-to-

face deliveries in traditional education practice. While a policy document is based primarily on the principles of the intention, the regulatory document, in contrast with the management document, contains state titles and references to more policy documents. Compliance with this regulatory document is mandatory and if not adhered to can result in the loss of funding and affect the accreditation of the education institution.

As identified previously, the process of validation creates many challenges to RPL practice.

The European Union policy and the inclusion of validation was a primary driver of the focus on economic issues, in efforts to create a knowledge-based economy (Souto-Otero, 2016). This validation was introduced to enable transparency of qualifications, and to provide a process whereby the learning that has been acquired outside of formal educational practices can go through a confirmation process authorised by an authoritative body. This assessment and validation process creates a formal outcome certifying that the individual learner has achieved the relevant standards of the qualification.

There is, however, a lack of clarity and consistency in implementing this process and the regulatory requirements of validation practice become prohibitive to the point that many institutions in Victoria do not undertake the RPL practice.

Bohlinger et al. (2016) find that the main dominant patterns of research of validation include social justice and power relations in validation.

This dominant pattern of social justice in research parallels the element of social justice presented in policy documents regarding validation of non-formal and informal learning (Souto-Otero, 2016). The social justice element in the policy documents is

included as a provision to provide opportunity for those from a disadvantaged background. This opportunity was to increase participation in higher education and in particular for the lower qualified cohorts, the socially disadvantaged groups, to have the opportunity for the recognition of the knowledge and skills gained outside of formal education and training.

Information beyond the validation processes can often be a contradiction to the ethos which the policy was developed (Bollinger et al., 2016). A commercial rationale in some projects implementing a recognition and validation process tends to focus on selective competencies, with preference given to those that can be valued and utilised in a commercial application. This is done in lieu of focusing on the individual and the analysis of their knowledge and competencies for transferability (Berglund & Andersson, 2012). This may result in particular skills remaining invisible because the competency mapping of the project is geared towards making a success of the project, and not towards the needs of the individuals targeted by the project implementation.

Bohlinger et al. (2016) find that individuals at managerial and intermediate labour level benefit most from a validation exercise while low-skilled individuals only make up a small percentage of less than 20%. They believe more research has been done on elements outside of social class, and more needs to be undertaken based on gender, race, and language proficiency so as to illuminate the gaps in the relationships between social justice, inequalities, and validation.

A lack of procedural knowledge of validation combined with the lack of commitment to use validation in the current educational culture, results in less time devoted to informal and non-formal assessment compared to assessments carried out in the formal learning environment within the Institute (Stenlund, 2010).

Valk (2009) notes that this element is also combined with attitudes of institutional staff regarding the value of the knowledge gained outside of the institution. The focus is not on learning outcomes, but the process taken while undertaking assessment, and on traditional input-oriented education as occurs within institutions (Valk, 2009).

This creates possible negative experience for both the candidate and the assessor in the validation process. Translating prior knowledge into specified competencies appears mystifying to many students, who do not understand the validation process, language and volume of evidence required to be presented and judged in the validation process (Chaparro, 2012; Diedrich, 2013; Stenlund, 2010).

Stenlund (2010) believes the inconsistencies amongst education providers' recognition of prior learning procedures could possibly disadvantage the applicant or may actually create an advantageous situation for the applicant dependent on the program and the attitude towards validation of prior learning recognition. This difference is dependent on what the assessor deems valuable knowledge or even the presentation of knowledge—for example interviews, challenge tests, and portfolios.

This allocation of value to knowledge is reliant on the confidence of the assessor, and then judgment and interpretation of the evidence gathered during the recognition of prior learning process (Joonsten-ten et al., 2010).

One of the key challenges of recognition of prior learning in relation to the judgment and interpretation of evidence is that of the current prescriptive, curriculum style regulatory environment that controls the current state institutes in Australia. Regardless of the assessor's interpretation of evidence, there must be clear documentation and an auditable trail to satisfy the government regulators.

The regulatory conditions appear at odds with the values and priorities of validation of learning and government policies (Bohlinger et al., 2016). This might be due to the regulatory requirements implementing the auditing requirements for delivery of mainstream institutional-based education in the recognition of prior learning environment.

Bennett et al. (2016) interpret liberalisation in education as consumer individualism, marketisation and competition embedded in a modality of both governmental and institutional audit mechanisms focussed on regulation and performativity.

This system of regulatory environment springs from a neo-liberal strategy of education instrumentalism and societal instrumentalism.

Society as a System

We live a in society that is forged by thinking. We are a product of our living system; an example might be teacher training and supervision practice. This may involve learning from a structured program, possibly written for many years, re-creating the past and re-creating the viewpoint of the teacher, supervisor, assessor. In a supervised teaching environment, we are expected to behave in a prescribed way, the supervising teacher marks off our performance against a predetermined rubric. We feel a desire to perform and meet the prescribed performance indicators in order to pass an assessment to be a teacher. We need to pass, not to fail; we strive for affirmation from the existing system. Thus, the system reproduces itself, determined by its structure, with one producing action that correspond to a description of behaviour from the system (Mariotti, 2002).

As we gain affirmation, we become not only a passive, obedient element in the system, we feel we become an authority element of the system and our self-interest creates an internal viewpoint. We are observers, our ego is developed, creating a boundary between ourselves and the world. This means we develop a restricted and fragmented world view and knowledge. The system reproduces itself in totality as we gain confidence in the system and our ego leads us to believe we are authorised to judge others who differ from our fragmented and limited knowledge base (Mariotti, 2002).

This system, contains conditioning via the stimuli of what might be called an industrial mass-produced format of society, resulting in communities that started from aspiration for a good quality of life. However, what can be seen is that quality is accessible only to a minority and the costs of this quality are the generation of social exclusion. This can be due to the idealised vision of money at the cost of the cultural value and reflects an emphasis on human capital in lieu of on the development and welfare of human beings. This alienation of ourselves from things of the world leads us to value things excessively, for example money; in this process we depreciate ourselves as individuals and diminish our humanity towards peers, viewing people as trading goods (Heidegger, 1962).

In the construction industry an example of this behaviour can be described as people wanting jobs cheaper and quicker, with the value of money becoming more paramount than the physical and mental well-being of the people undertaking the job. A recent study conducted by DiNuzzo (2021) reported that construction managers average 75 hours of work per week. This is an example of the over-idolisation of money, with profits and egos morbidly sacrificing family life and removing the

nonmechanical dimensions of human existence to satisfy the system's linear thinking and reduction of humanity to fulfill the aims of a market economy.

People who do not fit the predetermined mould of that particular society, for example members of certain races, genders, and immigrants, find that the recognition of knowledge can be driven by particular essentialised views dependent on the country where the immigrant (for example) is from, so that the knowledge is considered to be somewhat inferior and would not be deemed valid. This difficulty in matching learning that originated from a different social system and education system to that of the validating authority becomes an exclusionary practice (Guo, 2010).

Education as a System

Canario (2008) viewed education as a mainstay of integral development of the human brain and saw it as essential to social emancipation and the individual. Finger and Asun (2001) stressed the importance of lifelong education, arguing that education happens throughout the lifespan, that education is everywhere. For them, life is the mind source of learning, education is for everybody, and lifelong education requires a flexible and dynamic approach of education. The main objective of lifelong learning is the improvement of life quality for people.

As lifelong learning evolved and converged with other models of learning it had become apparent to some (Freire, 1987; Illich, 1985), that universal education is not feasible, commenting that people learn in communion, mediated by the world, a liberating education perspective.

Finger and Asun (2001) contend that adult education has evolved in line with human society, but also with the economic and political framework. As countries

develop the national education policies and guidelines the resulting common actions have created a consolidation of education and institutionalisation (Antunes, 2006). This reordering of education policies in a utilitarian model created a model of education and training policies at the national level (Antunes, 2006). These education and training policies provide advice on promoting competitiveness in the European economy. The European commission published a memorandum on lifelong learning in October 2000. This concept introduced changes in the way of viewing education. It recognised different forms of knowledge such as formal, non-formal and informal.

An element of the lifelong learning strategy is recognition and validation of normal formal and informal learning and, therefore, the recognition of prior learning is embedded as a critical aspect of the lifelong learning framework (Poulos, 2014).

This framework of skills and competencies has an absence of vision regarding adult education as noted by Friere.1987 and fails to consider the means to raise autonomy and social consciousness in providing the adult with conscientisation.

I would argue that RPL should draw from Habermas and Blazek's (1987) thinking about knowledge being considered within the social as well as the individual context which is closely aligned with Honneth's (1995) recognition theory.

This thinking perceives reality as transformative and not a static representation of the anti-dialectical assessor. This anti-dialectical assessor views their own past learning and experience as the normative measure of how the candidate should behave and present themselves. This is termed assimilation (Atherton, 2011) where the candidate must align their understandings of themselves with the knowledge of the assessor.

This obstruction of communicative action and the resulting destruction of consensual knowledge also jeopardise the formation of solidarity and individual identity. This is similar to Honneths' (1995) theory of recognition where emotional and mutual approval are required for recognition in an environment that legally respects the rights of the individual. These rights are the shared and normative responsibilities that recognise us as significant people and allow us to be involved in establishing these responsibilities. Loss of these rights limits the level of moral responsibility of that individual in society and may cause a loss of self-respect and a lack of recognition of the individuals' unique contribution towards society's goals.

This places education as having a human capital function, with students needing to acquire knowledge and skills to allow positioning in the labour markets. This requirement to knowingly and logically drive themselves to the future goals, requires the individual to have the self-determination, the self-direction and the self-design as well as the will to manufacture their life trajectory. There will be, however, the individual that may lack these personal traits and be deemed to be not resolute enough or industrious enough to design their life trajectory. This study looks at ways in which we can engage this cohort.

This is contrary to the practice that occurred in Australia after the Second World War, in which immigrants and refugees to the country were assessed as to the skills they brought with them from their home country and allocated particular roles in society based on the outcomes of these skills' recognition exercise. This use of validation as an inclusive social tool provides an example of how validation can be used with differing outcomes and purposes dependent on prevalent priorities, and public policy (Harris, 1999). This skills validation for migrants entering Australia occurred prior to the implementation of neoliberal economic and educational strategies

that have refocused validation, reducing it to the individual elements of the competency by delving deeper into the individual micro elements of performance criteria.

There is a need to bring about greater ethical and moral perspectives to the RPL process via recognition theories and a renewed focus on emancipation and inclusion (Hamer, 2011).

Group Culture

An RPL system that is considerate of the construction industries group/teams culture may have a greater impact on encouraging non-qualified building industry employees to undertake an RPL process, formalising their experience and encouraging them to continue as lifelong learners. The possibility of benefits in such a system validates the research investigation into group RPL practices.

In the physical environment, Vygotsky (1978) found people reveal greater social cognition in social contexts. This finding has guided RPL practices to include an authentic work cultural environment, utilising the sociocultural aspects of this environment to assist in drawing from memory representations of knowledge held. This process in a small group environment allows the assessor to identify the potential of the candidate in the field in which they are requesting recognition.

Collective honour from being an individual member of a group that accomplishes a task builds solidarity and symmetrical self-esteem and, in turn, develops the individual's self-esteem via recognition that the individuals' traits and abilities are worthy (Honneth, 1995). This aligns with the notion of group RPL practices being a socially responsible alternative to some of the existing RPL practices.

This assessment of a candidate's potential, via a social environment is a better reflection of abilities than what the candidate can do or say alone (Miller, 2011). Without dynamic dialogue the assessor cannot witness the historical experiences of the candidate and analyse these on their own in order to find out what the person knows. The lack of dialogue mythicises the notion of the perceived ideal and alienation results. The dominant assessor organises the practice to reflect an organisation of social order (Freire, 1972).

Freire (1972) explains that a dominant, anti-dialogical action is a necessity for conquest, a term he stresses is an innate desire for one to conquest another. Without discussion, the candidate cannot be considered as a co-contributor to the assessor's world or be seen as an equal in the assessor's world, so the world is mythicised in order to increase the candidate's alienation and passivity in the RPL process. The world is presented as a fixed construct where the candidate must adapt to the view of the assessor. The imposition of values and constructs of the assessor on the candidate protects the assessor from losing their values and therefore preserves the superiority of the assessor in the relationship. The identification of ideal attributes of an RPL assessor may include a non-dominant persona.

The concept of dialogue also is prevalent in the work of Vygotsky. He believed that participation in culturally organised activities leads to enculturalisation, a cognition of understanding rather than a set of static knowledge. The sociocultural–historical context defines and shapes the candidate. Because of this inter relatedness, looking at the candidate while ignoring their cultural context distorts our perception of them. This may explain why Sweden implemented the 25/4 rationale of acceptance of knowledge (Anderson & Fejes, 2005), by accepting the enculturalisation that would

have occurred at the minimum age of 25 and 4 years of work environment experience and exposure.

It should be noted that both Freire and Vygotsky wrote about these concepts of education and human development and did not refer purely to assessment activities. Nevertheless, their understanding of learning and cognition as social and dialogical is central to an adequate approach to the learning, teaching, and assessment of the disadvantaged in society.

A study on engaging learners conducted by Melbourne University (2018) found learner anxiety to be the most significant factor influencing learner performance. Anxiety was also linked to the lack of engagement and in the study, which interviewed many students across the university, it was found that after a short time of disengagement, the learner did not attend as they no longer identified with the university. The research determined that the learners favoured the social perspective; the learners wanted small group discussions and social learning. The learners believed the social connective drove positive engagement in the course. Talking with learners creates engagement, as learners feel a connection with the teacher/assessor at the institution. This makes the institution a place where the learner attends positively and joyfully. Non-formal, small-group discussions about backgrounds, aspirations and how they feel create a positive view of the institution and the teacher.

This research shows that teachers can create a better environment, by driving belonging and engagement and by implementing collaborative learning (Melbourne University, 2018).

Integrating the Workplace in Group RPL Practice

The cohort targeted in this research utilises construction tools, artifacts, texts in everyday life, so use of the same artifacts and texts in the assessment activity and utilising a simulated work environment provides the opportunities for the candidates to be exposed to the differing forms of distributed cognition in aiding memory.

Frederic Vallée-Tourangeau and Gaelle Vallée-Tourangeau's (2009) work on distributed cognition shows a positive impact on information recovery for ability and performance. There can be errors in performance that come from a breakdown in mental routine due to shortage of individual memory, resources, or motivation. Using artifacts may assist in memory recall, problem-solving, and reasoning in cognitive processes. These material artifacts prompt thoughts and actions that are realised while reasoning takes place (Vallée-Tourangeau & Vallée-Tourangeau, 2009). Memory recall can also be activated by interaction with others, such as working in a team, or a group.

Wegner (1995) proposed a design process through which groups store and retrieve knowledge collectively. He developed the concept of the transactive memory system based on the theory that when two or more people work together over a reasonable chronological timeframe, they develop a shared storage of knowledge and information about each other, retrievable from each other. Transactive memory in a group consists of each individual's memory and knowledge and also a metamemory holding information about other individuals in the group's domains of expertise. The other members of the group can be seen as an external memory aid allowing an individual to be aware of what information is available from the group. In this way, the knowledge of the collective group is enhanced via the use of a transactive

memory system, the external memory. The use of a transactive memory system helps operations of the group to be more effective than any of the single individuals within the group.

Wegner (1986) identified coding, storage and retrieval as the three stages of developing a transactive memory system.

Information gained regarding the other team members' domains of knowledge is categorised by each knowledge domain aligning with each team member. These can emerge via conversation and discussion regarding the task. This encoding process occurs through the interaction between the group members that provides opportunities for the group to learn and store the expertise of each individual group member. This information is retrieved by the use of the developed transactive memory to identify the group member with expertise in the required knowledge. This retrieval might occur through a series of consultations with the expert group member.

Research has shown that a stronger Transactive memory system is developed when group members were trained together; such groups made fewer errors and had greater recall of information compared with groups where group members were trained individually.

Austin (2002) demonstrated that the group training and interactions that occur during this training provided the group members with an understanding of the other members' skills. This communicative experience is a critical element in developing a transactive memory system.

In the context of valid knowledge, the group utilising a transactive memory system can determine the validity of the individual's knowledge and information.

This information is evaluated and encoded into the memory system, and as this information and expertise is utilised within a task or project accomplished without issue, the individual's knowledge will gain more credibility (Wegner, 1986).

A strong transactive memory system provides the shared understanding of the group regarding the interpersonal relations in the group and assists in the recognition of various ways of thinking and doing things among individuals. This leads to a better prediction of how the members of the group would behave in the required task or project, thereby enhancing efficiency and coordination (Cannon-Bowers, et al., 1993).

The material/artifact presentation from the familiar workplace environment becomes a stimulus to the memory as does the transactive memory process that can occur when working in groups. This may assist the candidate cohort in this research when undertaking an RPL assessment.

Chapter Summary

This chapter sought literature that can inform the research questions regarding current best practice of RPL activities, current issues with RPL in the construction industry, and questions regarding a group-based solution. This information on the positive and negative aspects of RPL, combined with literature regarding societal and educative life systems, group dynamics, including dynamics of learning, and the impact of the workplace environment, was used as a guide for the interview discussions and in the development of the observed assessment activities as part of this research.

Key points of consideration emerging from the literature.

- Language is a prominent factor in the assessment activities (Conrad, 2010; Hamer, 2010; Pitman, 2009).
- The "presentation" of evidence can be assessed with greater weighting than the evidence itself (Stenlund, 2010).
- The rhetoric of the educational vernacular and lack of plain-speaking leads to a mythicisation of the world by the assessor (Hamer, 2010; McLaughlin & Mills, 2012; Taylor, & Clemans, 2000).
- Limited ability to elicit and interpret input from the candidate can be evident in the assessor when assimilation and accommodation govern the acceptance of knowledge (Atherton, 2011).
- There can be a lack of dialogue within the process of RPL that renders the candidate marginalised (Cameron & Miller, 2004; Freire, 1972; Hamer, 2010, 2011; Perry, 2009).
- Candidates from marginalised groups, such as those with a non-English speaking background or an Indigenous background are less likely to be successful in current RPL processes (Cameron & Miller, 2004).
- The inclusion of the authentic work environment brings assistance in memory representation of knowledge (Vygotsky, 1978), and the use of artifacts to assist in memory recall and problem-solving (Vallée-Tourangeau & Vallée-Tourangeau, 2009).
- Group RPL processes may instigate transactive memory benefits in assessment (Wegner, 1986).
- Group RPL processes may build self-esteem for this identified cohort (Honneth, 1995).

There were RPL assessors who utilised dialogue as a key point in the process, however this is an individual trait and not a policy driven process. While there are many that carry out sound individual RPL practices, the utilisation or concept of group RPL was limited to the work of Harris (1999), Cameron (2013), NSW Department of education and Communities (2015), and Deller, (2020).

Aligning with the direction of this inquiry, this small element in the literature believes the application of Group RPL procedures may negate some of the current barriers which include, complex processes, inadequate support, confusing language, and lack of confidence (Cameron & Miller, 2004).

With attainment of a Certificate III level qualification seen as the greatest positive impact on social inclusion (Buddlemyer, et al., 2012), this research will focus on the socially disadvantaged cohort of low/non-qualified construction workers who are engaging in obtaining a Certificate III level trade qualification. The outcome of the study will provide a significant contribution to not only the research field but also the construction industry and more importantly to a distinct socially disadvantaged cohort.

This chapter presented the literature regarding RPL practice from a global perspective, an Australian perspective, and a construction industry perspective. This chapter investigated literature providing information informing the research questions being,

- What is the current best practice of RPL activities?
- What are the current issues with RPL in the construction industry?
- How could a group-based approach provide construction workers with qualifications?
- How could a group RPL process be successfully implemented in the Australian Construction Industry?
- To what extent would a group-based approach engage construction workers to take part in the RPL process?

This broadness in scope of the literature derives from the need to understand the linkage between the physical RPL environment, the language of the process, and the disposition of the assessor. It is important to understand how these all interpolate to create an optimal group RPL process for the identified cohort of low/non-qualified construction workers.

To ensure the outcomes of this research are attained, the application of sound research methodologies must be utilised to provide confidence in the findings and recommendations. The next chapter presents the research methodologies utilised in this research, the method of data collection and the integrated analysis approach employed.

Chapter 3: Research Design

Introduction.

The previous chapter identified literature regarding the research questions pertaining to current best practice of RPL activities, current issues with RPL in the construction industry, and a possible group-based solution. This chapter outlines the methodology and methods utilised in gathering and analysing data for this research regarding the Recognition of Prior Learning (RPL) and the concept of group RPL.

Aims

The aims of the research are in essence social, with the possibility to positively influence the cohort of the low/non-qualified construction worker to undertake RPL due to a model that is considerate of the building industry's teams/group culture, with enhanced assessor–candidate–candidate interactions.

The research plans to integrate Group RPL practices in several assessment situations with the homogenous sample groups in order to observe the reaction and development of the participants, including assessor participants.

This will require interviews and observations to study the group context and individual opinions regarding their experience of the context so as to amass thick descriptions, allowing triangulation, reflection, comparative analysis, and the development of new theories regarding the Group RPL process. Interviews will be necessary in order to understand the experience/s from the participants' perspective (Vialle, et al., 2006). The researcher, during the research situations, is immersed within the setting and interacts with the participants, to identify and articulate the

observed experience/s. This also affords the collection of assessor-experience data in order to identify variables relating to assessor professional development in Group RPL practices.

Goals of the Research

My motivation in doing this study, is driven by three goals, personal goals, practical goals, and intellectual goals (Maxwell, 2009).

Personal goals emanate from the desire to ensure the industry that I was grounded in, as represented by the cohort in this research, grows and matures to remain a worthwhile career for people entering this industry and to ensure fairness and equity within this industry as well as a safe working environment. This research may provide information that could contribute to lowering the effects of the low social economic status of workers in the building industry through readier access to appropriate RPL processes. It may also help in addressing the high suicide rate among such workers and add a humanistic focus in an industry driven by profits. Findings from the research may also contribute to the education sector, which has been transformed from a focus on learning and knowledge, to a skills and labour-force based operating culture, due to the effects of neoliberal policies.

The practical goal is to understand the issues relevant to the identified topic in this study, to determine why this is happening in the industry, and to support my role as a manager within the education industry in designing a suitable solution that can support both the industry sector and the education sector.

The intellectual goals lie in understanding, identifying, and generating theories and processes that led to the phenomena or area of concern. I seek to analyse and look for the mechanisms and processes, and the relationships between the many variables to determine causal explanations. In the process, I hope to develop an understandable and credible research study not only for the reader, but also for the cohort being studied (Maxwell, 2009).

The research intention is to focus on the interactions by analysing what occurs between assessors and candidates and between the candidates themselves in a construction industry group RPL activity/assessment.

A blend of ethnography and case study was used. This mini ethnographic case study approach, situated within a constructivist paradigm, was used to produce a narrative of situations, processes or phenomena as reported by adults in the field of adult education in relation to their learning and the recognition of prior learning (Mertens, 2005).

Due to the proposition that differing qualitative methodological approaches can result in rich data (Mertens, 2005), a diversity of methods was employed to collect data, including interviews, survey, observation of assessor and candidate practice and personal narratives based on my own contextual experiences as a carpenter, builder, teacher, and manager of a faculty. The following sections provide a justification of the methods utilised in this study drawing on researchers who have used similar methods in their research.

Enabling the reader to make linkages between their own lived experiences and the experiences interpreted by the author, I have incorporated my personal narratives into this research, providing the opportunity for the reader to be empathetically

immersed in my personal experiences. Via the incorporation of personal narratives, I attempt to enhance the reader's understanding of my own experience. This way of describing narrative is an active process that assists us to make meaning of the world and our individual experience of it (Penketh, 2011).

In developing my narrative accounts, I have enabled myself to critically analyse my experiences and reflect on the assessment context from varying stances, as a participant of the experience and an author of the experience for the reader (Sparkes, 1999). This allows the reader to critically engage in the narrative, therefore relate the experiences of the literature, and develop correlations with realities (Tedlock, 2005).

An emphasis on the signification of experience is also elementary to the constructivist paradigm (Mertens, 2005).

Constructivist Paradigm

Constructivism regards knowledge is a social construct, and endeavours to understand the entanglement of knowledge via lived experiences (Mertens, 2005).

Meaning as defined by constructivism, does not just exist; it is constructed by human beings as an outcome of interaction and interpretation (O'Leary, 2014). A constructivist paradigm acknowledges that research is an outcome of the researcher's principles and beliefs (Creswell, 2014). Consequently, the incorporation of my own narratives acknowledges the constructivist paradigm through the provision of context to the research accentuating how the research and the researcher are explicitly linked (Mertens, 2005). Creswell (2014) considers that constructivist research relies on the participants and researchers' views and interpretations of the world.

Constructivism strives to make sense of the world, through the ideology of individuals, creating a schema and generating theories as the research evolves in lieu of commencing the research based on an existing premise (Creswell, 2014). Therefore, data collection and analytical methods aligned with the constructivist paradigm have been utilised to address the research questions.

Fundamental to the constructivist paradigm are the capturing of authentic interactions between the researcher and participants by observations and interviews (Mertens, 2005). Through the genus of the constructivist paradigm, data collection will be organised into two phases:

1. semi-structured interviews.

2. observation of the group RPL activity.

The possible influence of my personal views and experience on data interpretation is an element to be acknowledged (Creswell, 2014; Mertens, 2005). In qualitative research, the researcher is classified as an instrument of data collection (Mertens, 2005).

An outcome of utilising qualitative methods is the empowerment of the researcher to recognise the importance of their own beliefs, assumptions, and biases for reflection throughout the progress of the study. Interpretation of the data must be objective and made explicit throughout the research narrative (Mertens, 2005).

As this research uses a qualitative design, it is pertinent to get a rich and detailed comprehension of the participants who are experiencing feelings within the context of the RPL activity.

Telling the stories of others can be termed as Mimesis. Time is expressed through narrative, as the present moment mediates past experience and future

possibilities. This occurs through interpretive research practice that seeks to make sense of the research participants' behaviour, and in re-telling the participants' experience (Nguyen, 2013).

The Interpretive Paradigm

Research seeks to make meaning, via description, to understand the community, the social group and culture (Fusch, et al., 2017). Exploring, listening, observing, and understanding allow the interpretation of the participants' perspectives (Gray, 2014).

The reflective practice in the recognition of prior learning process enables the candidate to articulate and re-articulate their thoughts regarding their self, continuously reflecting on the past via conversations and self-assessments about experiences, in order to tap their authentic self (Nguyen, 2013).

This, however, relies on the candidate to be able to be not only reflective, but to be able to understand others' perspectives as well as their own, and to critically reflect on past experience enhanced by present circumstances. This creates new knowledge and a new self, as it allows the participant to identify meaningful learning experiences and remember them in the mediation of time, context, and future possibilities.

The ethnographic tenet of an interpretive model is to pursue emic (the study of a single culture and the meanings that comes from within that culture), meanings within the case being studied (Bartlett, & Vavros, 2017).

Ethnography

Ethnography is a qualitative design and is used in the interpretation and description of a social group via the extended immersion of the researcher in this group. The social group in focus could be a culture, a community, an organisation, a sub-culture, or a group within the aforementioned (Bryman, 2012; Creswell, 2007; Fusch, et al., 2017; Gray, 2014).

Observations and interviews occur as the researcher is immersed in the social setting for a prolonged period. This enables the ethnographic researcher to listen, engage in discourse, observe, and form an understanding of the social group and identify and examine shared patterns of behaviour. The researcher can collect documents about the social group in order to assist in development of understanding the contextual culture of the group (Creswell, 2012; Gray, 2012).

There are viewpoints that ethnography is the completed outcome of the research activity, being the written product and other views that characterise ethnography as methods to obtain the research data regarding the culture of the group in focus (Berg, 2001; Bryman, 2012; Creswell, 2007).

Ethnography is a derivative of anthropology, looking at the study focus from the participant's eyes, however at a macro, cultural, organisational or community level (Fusch, et al., 2017). This aligns the use of ethnography with the non or low qualified construction worker, a relatively homogenous subculture.

As the recognition of current low skilled workers in the construction industry is urgently required due to the forthcoming licensing laws, ethnography can focus on the

macro level, looking at group processes in the recognition of prior learning group setting.

In ethnography the analysis of the culture sharing group studying the interactions in the cultural setting looking for patterns. Given my background and working life, I was able to bypass some of the long, extensive time frame required to immerse myself in the cultural group and could form an understanding of this cohort in a shorter timeframe.

This study could have been a single Ethnographic study; however ethnographic research tends to look at the whole cultural cohort, involving many participants over a long chronological timeframe. In particular circumstances the use of a reduced, or scaled, ethnographic study is sometimes appropriate. This is described as a focussed ethnography (Bartlett, & Vavros, 2017) or a micro-ethnography (Bryman, 2021).

As ethnography intends to discover the cultural group work in lieu of understanding a situation or problem, combining a case study approach with an ethnographic approach was utilised to address the inquiry into individual cases within a boundary of context or setting, affording an understanding of the phenomenon with a lesser number of participants (Creswell, 2014).

Combining a Case Study

Case studies can be explanatory, exploratory, or descriptive (Fusch, et al., 2017), and aim to investigate and report on the focused issue, or phenomenon and to describe a situation in detail through the in-depth data collection utilising multiple sources of information such as documents, interviews, and observations (Creswell, 2014).

The case may be the location, or setting, or it could be a person or a group of people. Case studies can also employ multiple locations or settings, this being termed multiple case studies (Berg, 2001; Bryman, 2012; Creswell, 2007).

In the context of groups of people, a case study of communities could be utilised. This community could be a homogenous subculture, for example the non or low qualified construction worker undertaking an RPL activity.

Case study can provide a generalisability of the understanding gained by the research, to be applied to similar groups. The reasoning to support this generalisability is the universal and predictable behaviour of humans (Berg, 2001). This creates value in providing theoretical insights that may transfer to other similar phenomena (Creswell, 2007). Although a relatively small data set will limit this generalisability, the use of multiple cases also aids in the generalisability of the research findings.

Case study looks at understanding a problem, or phenomenon, utilising the case, or multiple cases, as the specific vehicle. These cases are constrained by boundaries. However, ethnography sets out to investigate the culture, utilising a broader lens (Creswell, 2007).

In case study research it is important to represent contextual validity and integrity in location and not to represent a generalistic, or clinical setting. Bartlett and Vavros (2017), point out that we do not exist in a laboratory, we live in a world full of social mechanisms with political and economic influences that permeate temporal boundaries, real at the time of the study, and contextual in the sense of history. Studying the phenomenon in the real-world situation, the contextualism of the case study, provided the element of ethnography.

This combination of case study and ethnographic study is termed a mini-ethnographic case study (Fusch et al., 2017). This meld of ethnographic and case study methodology is suited to the resource- and time-constrained environment. As case study evolved out of ethnography, the blend of the two is possible (Fusch, et al., 2017). Fusch, et al. (2017) also described this as a focused ethnography, which can be used to look at values and cultural norms of the studied cohort.

The Mini Ethnographic Case Study

The mini ethnographic case study design consists of data collection from both designs being, document review, observation, semi-structured interviews, group sessions, and participant observations, with resulting broader perspectives on the research topic, within a time and resource constrained environment of the case study (Fusch, et al., 2017).

Mini-ethnographic case studies are typically conducted within a timeframe of twelve months or less, allowing the research to achieve data saturation quicker due to the boundaries of the case study (Fusch, et al., 2017). The use of the mini ethnographic case study is well suited to the student researcher, given the limited timeframe and resources. Examples of its use are provided by Katelyn Zirkus (2019) who implemented this approach in a dissertation titled "*Informal interactions: A mini-ethnographic case study of students with emotional and behavioural disorders*", and Kari Eller's dissertation *"The trail of courage: A mini-ethnographic case study exploring the feasibility and acceptability of integrated equine-assisted therapy (IEAT) on Yazidi adolescent girl wellbeing".* This blend of study designs can amplify

the best of each design while also alleviating the limitations and challenges of each design (Fusch, et al., 2017).

This qualitative investigation aimed at exploring the particular cohort of low skilled construction workers in a group RPL environment (the case) and employed an ethnographic design to explore the interactions and meanings of this group. This involves identifying beliefs and relational meanings between the individuals as they interact within their cultural group and how they react to an important changing phenomenon (Fields, & Kafai, 2009), being the impact of trade licensing.

This plurality of data collection methods from both the ethnographic element and the case study element of the research design, enables the researcher to explore causal links and to generate real world theory while studying theory, however within the timeframe and boundary of a case study design (Fusch, et al., 2017).

This research focused on the experiences and feelings of the participants in relation to the attitude and perceived power of the assessor in a recognition of prior learning activity.

The mini ethnographic case study methodology allowed an in-depth exploration of the RPL assessor practice from an historical viewpoint of the participants and enabled deep insights of both the participants and the assessor within a small number of Group RPL activities. Using the logic of multiplication, the investigation of multiple RPL activities, and multiple cases is deemed to provide strength and validity to the findings (Creswell, 2014; Yin, 2014).

Coming from a background in both the construction industry and the education industry allows me to enter the social realm as an insider rather than being seen as an

outsider who needs to pass through the gatekeeper. This allowed the research to commence quickly on the cultural analysis of how the group interacts, learns, and the group's cognition regarding the use of functioning tools or artifacts.

As the researcher is the main data collection instrument, Marshall and Rossman (2016) believe that being from a similar background as the focus of study can make the ethnographic research susceptible to researcher bias. For this reason, it is important to present the participants' views and not the personal views of the researcher.

My background in the construction industry is clearly articulated in this research in order to present my personal lens and to enable me to observe, listen, and interpret the behaviour and stories of this cohort in the field (Fields, & Kafai, 2009). This allows me, as the researcher, to reflect and to contextualize and understand the cultural cohort in this study. This reduces the assumptions that might prevent me from really understanding the participants. It permits me to use my personal experience—— my own story—in authenticating the participants' story, and to disseminate these interpretations to the world outside of this research cohort's culture (Amerson, 2011).

Methods

The data collection methods employed were semi-structured interviews with teacher assessors and recognition of prior learning participants along with observation within recognition of prior learning activities.

Interviews in a qualitative approach provided a meticulous understanding of the questions being investigated by speaking directly to people and enabling them to tell their stories uncontaminated by previous learning, literature, and our expectations (Creswell, 2014). These interviews were conducted with research participants to

allow an understanding of the context of their social and historical world through an adult education and recognition of prior learning lens, giving meaning to their experiences (Delory-Momberger, 2012).

Observations occurring in the RPL context provide insights into the practice of the assessor, allowing comparisons between standard singular group activities and group RPL activities (O'Leary, 2014).

Interviews after the observation activity provided an opportunity for the assessor participant to explore aspects of the interplay that occurred during the observation, allowing for reflection on the reactions associated with the interactions. This approach established a framework of data collection that is both useful and meaningful to the social and emancipatory nature of the research question (Yin, 2014).

It is important to clarify what the participants said in order to enhance the validity of the research. When researching a specific culture, or group of people, the use of jargon and choice of language can make it difficult for researchers to understand what the participant means (Brett et al., 2007). As my background is the same as the research participants, the misunderstanding or misinterpretation of language and jargon did not occur.

Research Context

This research analysed the current recognition of prior learning environment and developed strategies to implement the new conceptual practices in the recognition of

prior learning and the subsequent analysis of these new practices via case studies of groups of research participants who were undertaking the group RPL assessments.

The group RPL activities took place in similar locations, however with different participants and differing assessors. This commonality is to ensure a logic of replication and ensuring the replication for each case, each RPL activity (Yin, 2003). Each activity will utilise the similar location, workshop, equipment and resources; the activity will assess candidates for the same qualification and the assessment processes remain constant.

Participants

Initial Interview Participants

Homogenous purposive sampling was utilised in the selection of participants for interviews. The participants in the initial interview comprised assessors of RPL in most cases in the building industry; they also had teaching experience.

Purposive sampling is when the researcher uses their judgement to choose people to participate in research. The use of personal judgement is the basis of purposive sampling to ensure the selection of participants is aligned with the research objective (Creswell, 2014).

For this study I employed a homogenous purposive sampling method of selecting people from a particular sub-group, the construction industry, who also have experience in the education sector, ensuring the selected participants are valuable contributors to the study (Creswell, 2014; Dudovskiy, 2018). They were selected due to their qualifications, experience, and background in the construction industry

and to the fact that they were qualified and experienced teachers with a clear knowledge of learning and assessment in an adult learning environment. I also took advantage of the opportunity to gain insights and opinions from the head of operations of a large qualification recognition organisation as part of this purposive sampling.

All these participants had experience in a recognition of prior learning activity as an assessor, a candidate or both.

It is acknowledged that there is a gender imbalance, which is due to the limited number of female construction teachers.

The premise in selecting these participants was to ensure the research remained within the boundary of RPL in the construction industry, and to ensure usable data was collected and was within the context of the study (Creswell, 2014).
A multitude of different people make up a society. These individual citizens have an infinite range of differences including, ethnic background, age, gender, socio economic status, educational attainment, job roles and marital status. This research purposely selected similar participants who aligned with the attributes desired for inclusion in the study.

The Interview Participants

The names are presented as pseudonyms.

Neil.

Neil was a construction trade teacher with approximately twenty years' experience in the construction industry and approximately twenty years' experience in the

education sector as a teacher and assessor. Neil currently teaches and assesses at a large metropolitan TAFE. The opportunity to talk with Neil via a semi-structured interview was valuable in gaining his opinions and examples of assessment and what he had learned over his career and life to date.

Ross.

Ross had valuable construction industry experience coupled with approximately ten years of teaching and assessing experience in the vocational sector. He provided not only an opinion of the Recognition of Prior Learning through the lens of an assessor, but also as an RPL candidate. During the interview he described to me both his negative and positive experiences as an RPL candidate.

Richard.

Richard's background is not from the construction industry, however he was included in this purposive sample due to his role as head of operations at a major qualifications recognition provider. I had the opportunity to interview Richard and gain a narrative of his experiences and personal and professional opinions.

Owen.

Owen was an assessor of construction trade apprentices at a large Metropolitan TAFE. He had experience at several training institutes and many years' experience in Recognition of Prior Learning programs. Owen came from a construction industry background and had long experience in the education sector, thereby fitting within the boundaries of the study.

David.

David possesses a vast amount of experience in the construction industry combined with extensive experience in the vocational education sector. He has relevant and current experience in assessing in the construction industry, particularly in the workplace setting.

Observation Participants

The observation participants consisted of 3 separate groups, each consisting of the assessor, and a small number of participants undergoing a formal assessment of their learning gained on construction sites.

Research Process

This section outlines the specific methods used in this investigation. There are three datasets presented in this study: my personal narratives, interviews with assessors, and observations.

Personal Narrative

The first dataset consisted of narratives of my own experiences. Embedding personal narratives can derive meaning from experience, including connections between the contextual values and beliefs of the researcher, and the research itself in many forms and authentic ways. This allows the researcher and the reader to engage with this

lived experience and makes evident the ways interpretation of other data is related to the researcher's thinking and experience (Tedlock, 2005).

Interviews

The second dataset was interviews with selected participants via a homogenous purposive sampling method. Semi-structured interviews provide an opportunity to capture an understanding of the participants' perceptions of recognition of prior learning from a historical and current viewpoint, and ensures the participants' voices are represented (Yates, 2008). This collection of information relevant to the context of the individual stories and experiences, the participants' jobs, their cultures, the time and place, and the historical context (Creswell, 2014).

The face-to-face interviews took place at negotiated times and places to suit each individual participant. The interview schedule guided the conversation by utilising several open-ended questions. The configurations were constructed based on the literature and also on my personal experiences. Concepts and thoughts of a broader nature were explored, providing greater context and the participants' history and values and opinions regarding adult education in the recognition of prior learning. This acceptance of free conversation outside of the question regime can provide valuable insights from the participants' perspectives by creating a relaxed and non-confrontational environment for sharing ideas (Foley & Valenzuela, 2005).

Prompts sourced from my personal narrative were utilised to stimulate recall. These examples helped prompt reflection and free discourse around the specific events, allowing the participant to talk about their perspectives and reflections on practice and experience (Jensen & Winitzky, 2002).

With the permission from the participants, the interviews were recorded and post interview, the process of transcribing the recordings verbatim to a document was completed promptly.

Observations

Observations were incorporated in order to capture the assessor and candidate practices within a group recognition of prior learning activity. This enabled myself as the researcher to view the social interactions present between the assessor and the candidates and also between the candidates themselves. Time spent with the assessor and the candidates was approximately seven hours overall; I was mindful not to interrupt the assessment activity and place any candidate in a disadvantageous situation.

Observations were made regarding the assessor's engagement and interactions with the RPL candidate participants. The elements of interest were predominantly behaviour, communication, and the outcome of the group recognition of prior learning activity in the context of each individual RPL candidate participant.

With the permission of the assessor and the candidate participants, audio recordings and photographs were taken along with written notes. This combination of artifacts was recorded in the field notes of the group RPL activity.

Adopting suggestions from Mertens (2005) and the University of Toronto (2021), an observation checklist was created (see Appendix 1). The research observation checklist with descriptive categories was used to identify the characteristics of the

assessor, and how they are prepared, fair and equitable, accommodating, and how they create an inclusive environment (Appendix 1).

This checklist is based on Mertens' (2005), checklist for teacher graduates and what makes a good teacher and was redesigned and customised on the basis of the analysed data gained from the research interview participants. This helped the checklist to be used effectively in the observed RPL activities. It ensured the commonality of observable elements, allowing a comparative observation of each individual assessor. There was a provision for notes and unforeseen elements to be captured.

The research observation checklist utilised nine themes for observations, with each theme consisting of several observable elements. The identified observable themes regarding assessor skills, technique and behaviour are as follows:

Assessor Organisation

This theme contains seven observable elements regarding the assessor's preparedness, structure and behaviour observed in the assessment activity.

Content Knowledge

A focus is on how the assessor is aligned to the acceptable industry and workplace standards in the field of this assessment. This theme contains two elements of observations.

Assessor materials

This theme concerns the level and quality of the materials and resources provided to the candidates via two observable elements.

Instructional Strategies

This theme has four elements of observation to record the provision of explicit directions through to the allocation of suitable time for the candidate to undertake the assessment activity.

Presentation

This aspect records three observable points in the presentation of the assessor regarding communications and enthusiasm.

Responsiveness to Candidates

The eight elements present in this observation checklist item allows the observer to record if the assessor addresses the candidates by their name, whether the assessor is a good listener, and whether the assessor utilises positive reinforcement.

Creating Inclusivity

The six observable elements in this theme are intended to record if the assessor creates an equitable and inclusive environment.

Clarity

This theme of assessor performance utilises three observable elements in order to identify and record the clarity of instruction and information the assessor provides to the RPL candidate.

Instruction and Assessment Settings

This final set of seven elements to record the observable behaviour against the elements of clear explanation of procedure, aid with interpretations, and place an emphasis on safety.

Utilising this checklist ensured a commonality of focus regarding each of the assessment activities observed. The observation checklist allowed the development of an accurate and comprehensive description of the setting and context and combined with descriptive notes being a description of the activity summarised in chronological sequence and reflective notes being reflections on activities forming summary conclusions, provides the data for theme development (Creswell, 2007).

Analysis of Data

In this mini-ethnographic case study, the analysis of the data coincides with the collection of the data, with the analysis returning to the research purpose and questions in order to remain focused (Yin, 2003). I considered it important in this mini ethnographic case study to converge the data in order to understand the whole, and not to classify each data source as individualistic, as this could result in the findings being separately reported (Baxter, & Jack, 2008). The convergence of data collected from a variety of sources allows the researcher to explain and to answer the how and why questions in context (Baxter, & Jack, 2008).

This mini ethnographic case study analysis followed a five-step process consisting of: gathered data management, reading and noting emergent ideas, description and coding/theme development, interpretation, and representation. This approach continually aggregates analysis from the observational descriptions of data into detailed analysis (Creswell, & Poth, 2018).

Manual coding was chosen to initially organise the data collected allowing the thematic links across the data set to be drawn out (Saldaña, 2009). As the data was collected, it was coded with reference to a pre-determined set of descriptive codes. In

utilising this method, the data could be analysed at a simplistic level, using small word sets or even a single word to encapsulate the topic of the section and the thematic elements. This descriptive method provides an uncomplicated application of data analysis in qualitative research (Saldaña, 2009).

Interactive Visual Concordance

This analysis method was implemented using Word Tree, an IBM designed application which is termed Interactive Visual Concordance (IVC) (Wattenberg & Viégas, 2015). This platform allows the researcher to visualise the spoken word. By transcribing the 70,000 words of participant interviews and entering this data into the Word Tree application, I was able to create a graphical version of the key words, or descriptive code, and this enabled rapid querying and exploration of bodies of text.

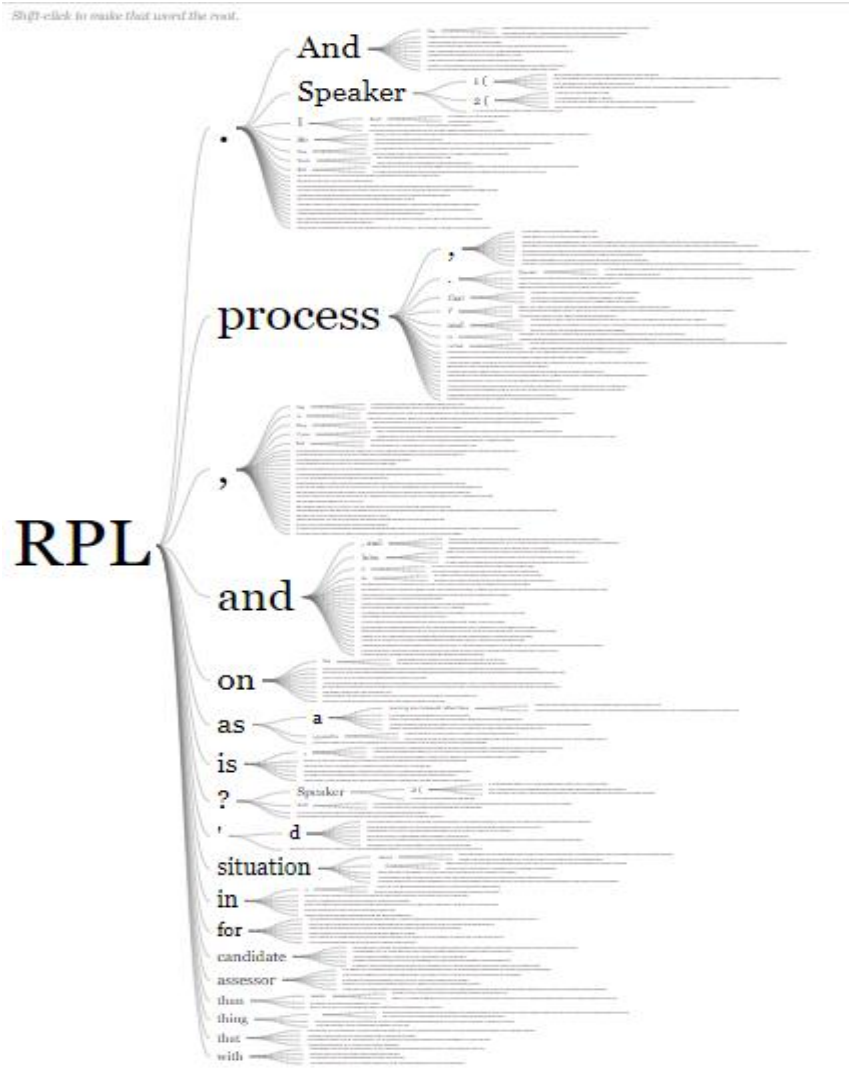
Concordance in this research was utilised to identify the context of the words used, rather than the use Boisen (2007) made of the tool when concordance helped compare the ways different words occurred in religious texts in his study.

The creation of the interactive visual concordance allowed a simplistic and timely method of analysing the interview transcripts, capturing key word occurrence frequencies along with the pre-word, and post word dialogue.

Below is an extract of the interview transcripts in this research, utilising RPL as the descriptive code in the initial analytical process. This example (Figure 1) identifies the words in the transcripts spoken after RPL.

Figure 1

Interactive Visual Concordance (IVC) (a)



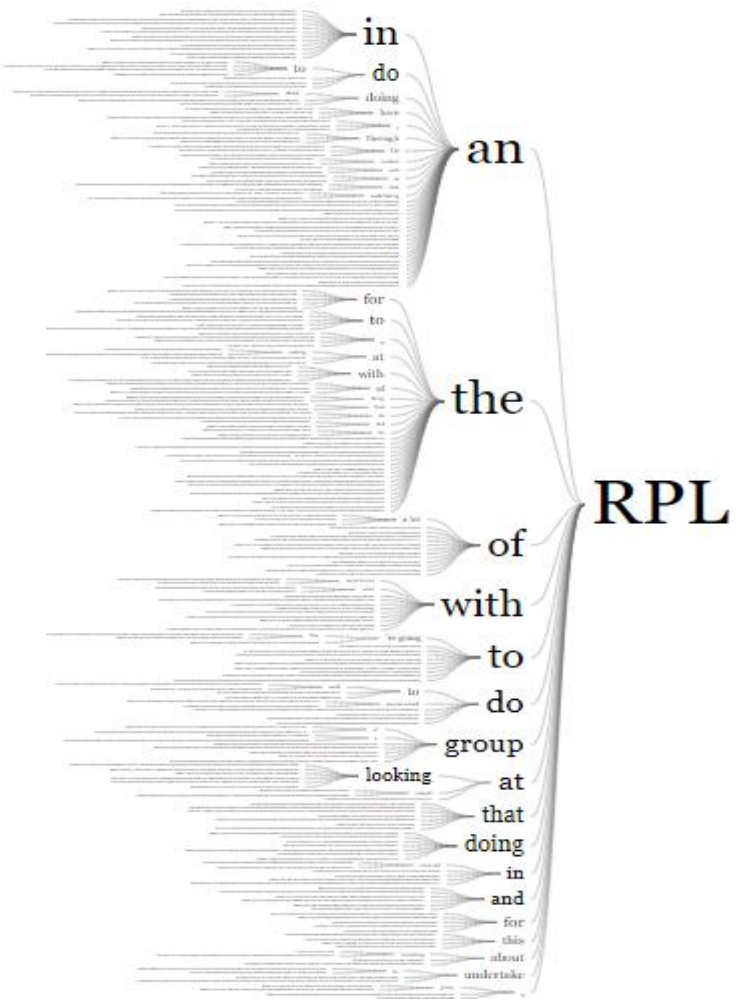
This visual concordance identifies not only the individual words appearing after "RPL" but the phrase, and how they combine with other elements in the sentence, providing a contextualisation to the use of the key word. This also provides collocation of the key words (Hue, 2015)

As words increase in frequency they appear as significant and are presented as sub-headings and lead to a cluster of sentences linked to the key word, in this case, RPL, leading in turn to the identification of semantic systems in the sentences relating to RPL. The application can be reversed to identify the words, phrases, and

sentences leading to the descriptive code. The picture below (Figure 2) shows the same descriptive code, or word, “RPL”, and the presentation of significant words, phrases, and sentences spoken prior to the word RPL.

Figure 2

IVC (b)

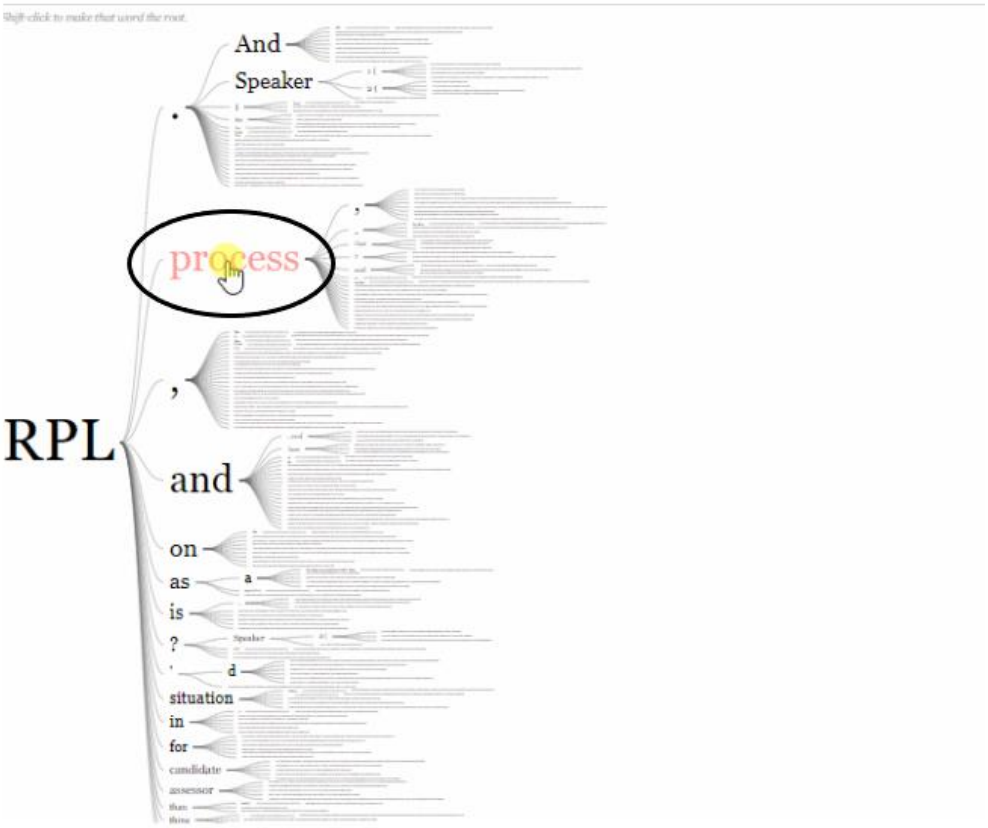


In a manual means of analysing large volumes of textual data, there is a possibility of unforeseen codes remaining hidden. Utilising this interactive visual concordance method of analysis as shown above, allowed these unforeseen descriptive codes to present themselves in a hierarchical presentation and lead to the discovery of further key elements of critical research data and the discovery of the important lexical and semantic fields (Nordquist, 2019).

The interactive visual concordance allowed me to delve further into the list of words, phrases and sentences as seen in Figures 1, and 2 above. This is conducted via the simple operations of "clicking" on the selected area—a word of significance—or even the phrase or sentence itself.

Figure 3

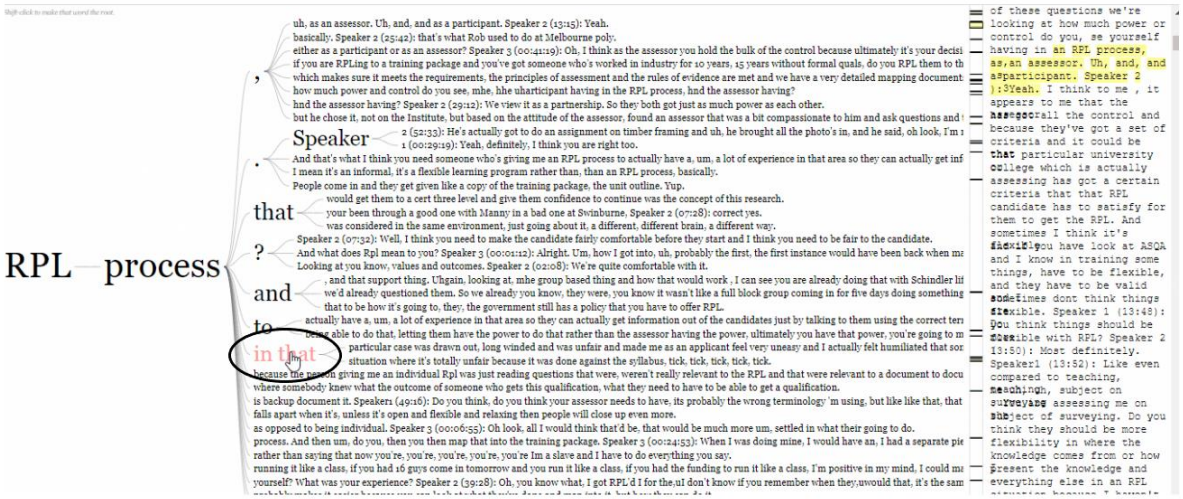
IVC (c)



In the screen shot above (Figure 3), I have selected the significant word/subheading of "process". This will drill further into the transcript field of data utilising "RPL process" as the descriptive code.

Figure 4

IVC (d)



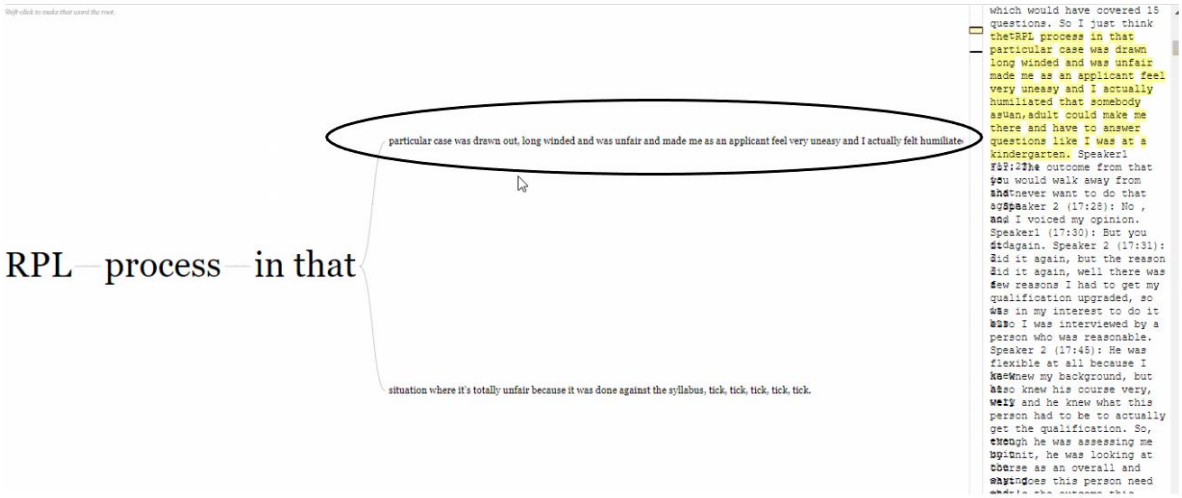
After selecting the significant word “process” the interactive visual concordance system will present the screen above (Figure 4). This expands the words to a greater readability and provides the actual transcript text on the right-hand side of the screen.

The short horizontal lines between the word tree and the text identify the positioning of all instances beginning with “RPL process” that appear in the entire transcript text. The system also highlights the text in yellow regarding the specific location in the text, with the cursor resting on it in the word tree.

In proceeding to a further investigation, with the selection of “in that” (circled in Figure 4, above), this will open the concordance using “RPL process in that” as the descriptive code.

Figure 5

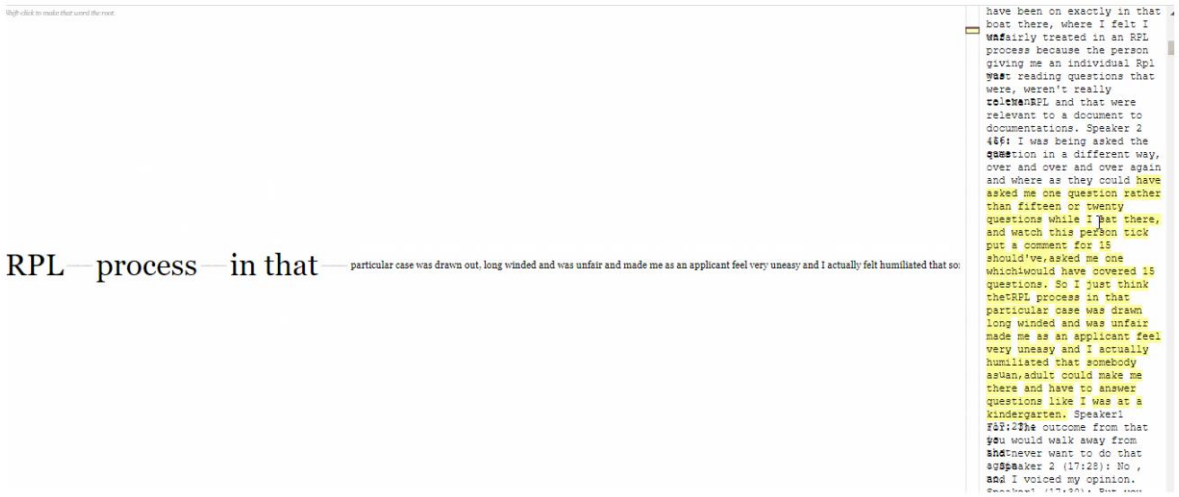
IVC (e)



As can be seen above (Figure 5), the interactive visual concordance system has identified two instances where words, phrases or sentences appear after the descriptive code of "RPL process in that". By selecting the top sentence (clicking the cursor on the sentence location as shown above in Figure 5), the system will present the entirety of the sentence along with the highlighted sentence in the text presented to the far right of the screen and the location within the chronological timeframe of the transcribed text by the short horizontal bars between the tree and the text body. See Figure 6 below.

Figure 6

IVC (f)



This allows the reader to add context to the word RPL via the array of words the interview participant chooses to associate with the key word of “RPL” in articulating their story.

This paradigmatic relation is a representation of the choices a person faces when encrypting their message and parallels the way our diverse experience and realities are captured, and how truth is being classified, sub-classified and weighted along specific scopes of variation (Cruse. D, in Grapes, 2015).

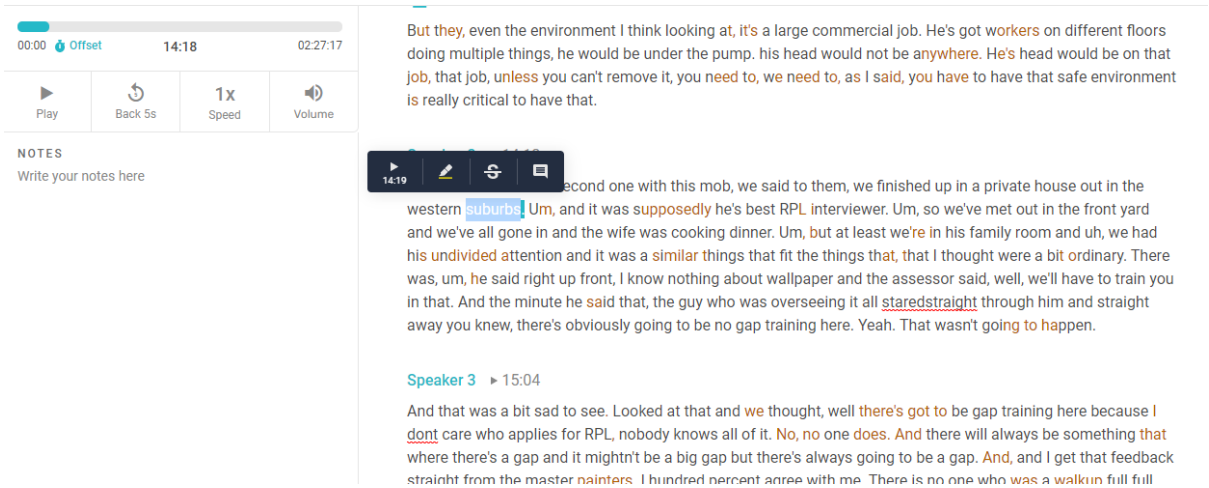
When transcribing the interview participants’ interview recordings, I used a program called TEMI, which allows the upload of audio data, and the system creates a text document of the recording for a small fee. The TEMI system transcribes audio to text via its automated speech recognition engine and was created by a group of MIT engineers and speech scientists who study the perception of speech and linguistics. First launched in 2017, it became a useful time- and cost-saving tool for journalists and professional writers (Chicola, 2019).

Sound Event Recognition

The benefit of this tool (TEMI), is that the text is continuously time stamped, enabling the identification and confirmation of the paragraphs within the text and the specific point in time of the interview. This proves to be critically important in the concordance activity. As the data entered into the visual concordance system is derived from the TEMI system, in the process of identifying key words, phrases, and sentences in the interactive visual concordance system, the located text on the far right of the word tree screen (see Figure 6) contains the time stamps associated with the data and provides the auditory location within the recorded interview. See Figure 7, below of a transcript in TEMI, where clicking on the word activates the playback of the audio allowing the listening of the identified word, phrase or sentence, with each word highlighted as it is spoken.

Figure 7

A Transcript in TEMI



Linking the visual concordance with the audio transcripts allows not only the identification of key words and phrases, but the ability to listen to the key words as

spoken by the research participants and include the tone and any emotion associated with the key words and phrases using the field of sound event recognition (SER) in determining the context and meaning that can be identified by the phonological sounds the speaker utilises (Hue, 2015)

Searching the interviewees' individual interview transcripts for the words, phrases, or sentences identified in the interactive visual concordance, and listening to the way the element is spoken, allowed the examination of any identifiable emotional elements connected with it. This helped me recognise the contextual significance of the word, phrase, or sentence, and to capture the pragmatic and attitudinal meaning (Hue, 2015), or as in the research by Mokharti, Clark, and Henriss-Anderssen (2013), to identify the dynamics of transmission, and expressive communication in an investigation of written and oral texts.

Verbalised words, our speaking, can be less organised and pre-arranged than written text. This is sometimes due to the speaker implementing shortcuts and using particular terminology to compress the complexity in the discourse, by assuming the listener has a cultural understanding of the terminology and shortcuts and their purpose (Mokharti, Clark, & Henriss-Anderssen, 2013; Rogers, 2015).

Using the hybrid analytical design of this research, the identification of lexical threads within the composition of the text can identify the disposition of the text, rather than viewing the text as a series of word, phrases, and sentences. This allows the text to be seen as a polylithic series of semiotic threads that are arranged together in differing ways and lead to the creation of a conclusive product (Rogers, 2015).

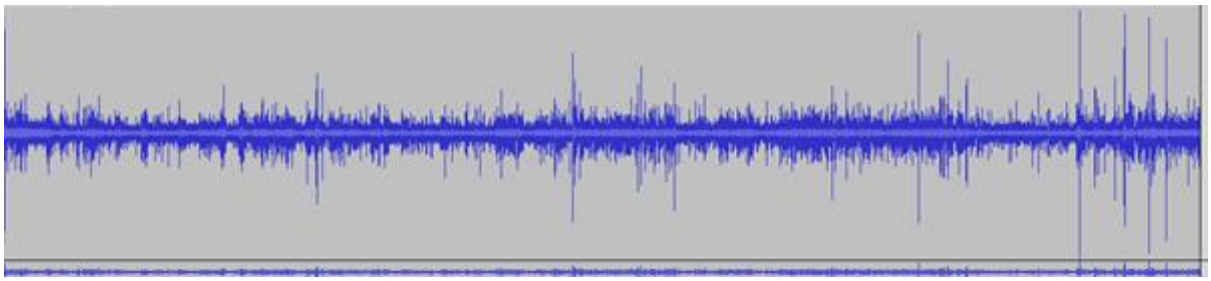
Image Process Analysis

Image process analysis (IPA) is the use of a visual representation of the audio tone and constitutes a method of interpreting the images and forming contextual meaning, allowing for this to be represented in the reported outcomes of the research. IPA creates a medium for the reader to comprehend and understand the emotionality of the participants' words. To this end, the Audacity program was downloaded and presents a visual representation of the spoken words. There are two visual representational choices, a waveform, or the spectrogram.

The use of a waveform graphical representation (see Figure 8 below) only presents the volume along a timeframe associated with the sound and could not present the tonal elements required to identify a possible emotive discourse in this mini ethnographic study.

Figure 8

Waveform Graphical Representation through IPA



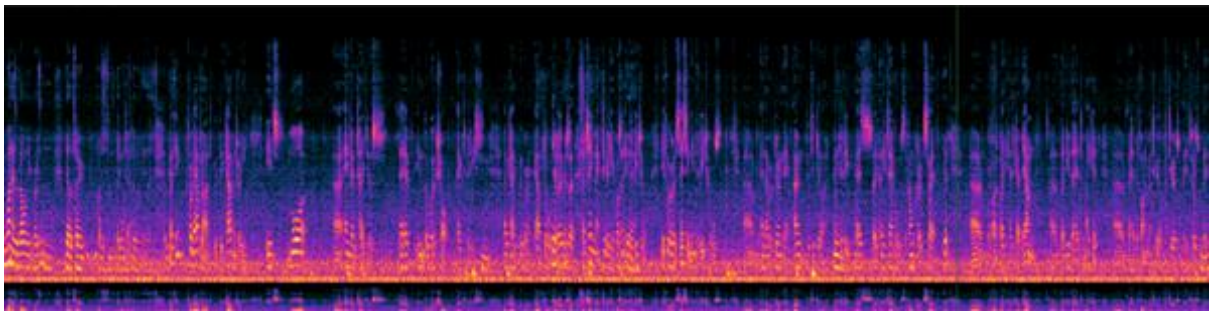
Therefore, this research utilised a spectrogram, a voiceprint representation, of the frequency, amplitude, and duration of the recorded individual participants' interviews. The voiceprint, or spectrogram, not only presents volume but also identifies tone and intensity over a chronological timeframe (see Figure 9 below). This provided the identification of elements and anomalies connected to the

transcripts and became a tool to identify the inflections applied to words, phrases, or sentences, and the context of silence, that would remain hidden in a textual transcript-only environment.

Identifying anomalies using a spectrogram was the basis of research for Dennis (2014), on human interpretation of sound events using sound event recognition in a quest to develop an automated speech recognition system.

Figure 9

Spectrogram Voiceprint Representation



These inflections can identify elements in the discourse that can be defined as happy, sad, angry, or a serious emotive state that the speaker has applied to these word, phrases, or sentences and allows a greater insight into the choice of language and use of tone the research participant has chosen to express their view, story, or explanation.

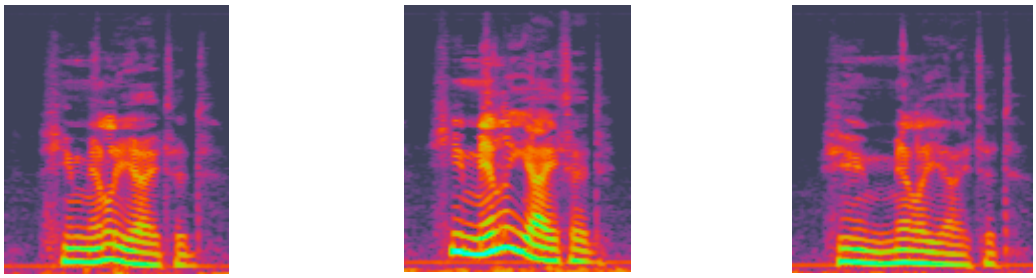
The use of a spectrogram to analyse tone was used by Franzoni, et al. (2020) to determine the emotional sounds of large groups of people, crowds, in large events such as soccer games. They used the frequency and amplitude features of the spectrogram to investigate their concept of crowd emotions, as in the 1997 study by Ben Pinkowski, who built on previous research findings that speech characteristics

are contained in the spectrogram and are identifiable via image processing analysis (IPA).

To present the visual differences of tone, I have presented (below, Figure 10) the spectrogram representation of the same word, spoken by the same person in the dimensions of: (1) normal everyday pronunciation, (2) happy pronunciation, and (3) sad pronunciation.

Figure 10

Different Spectrogram Shots of the Same Word with Different Tones



1 2 3

On viewing the three spectrogram representations of the same word we can see the bright lines at the bottom of the pictures displaying three varied shapes. The normal everyday speak displays a closeness of lines and slight elevation of tone (1), while the happy pronunciation of the same word shows the bright lines showing greater distance between them and distinct elevations in tone (2), whilst the third picture shows how the word is displayed when spoken in a sad voice (3). Note the flatness of the bright lines combined with the closer proximity of the lines compared to the normal and happy speak. Also discernible is the lack of light shading in the top half of the picture compared to Pictures 1 and 2.

This representation allowed me to listen to the interview transcripts whilst viewing the concurrent spectrogram representation in a combined IVC, SER and IPA method. In identifying anomalies such as flat lines, or elevated tones, I could pause and determine the timeframe, the time stamp of the recorded anomaly and in comparison, allocate the same point within the interactive visual concordance, creating a multi-field analysis of the interview participants' spoken words to identify amplitude, tone, and to include the contextuality of the conversation.

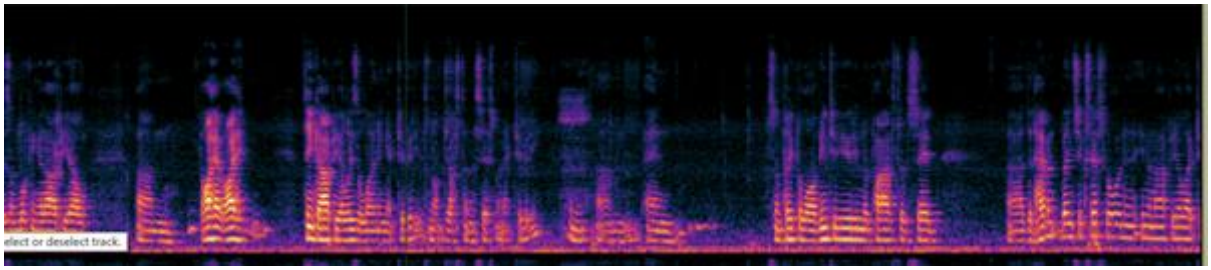
The spectrogram also identifies silence, the length of the silence between words, phrases, and sentences. This also aids the identification of emotion that is possibly connected with the words and/or the depth of thinking by the interview participant.

In a similar means of identifying tonal anomalies in the spectrogram representation, I could look for gaps in the vertical lines and shading of the spectrogram, the elements of silence. This silence can indicate deep thought, or an element of stress in speaking about the lived experience. Aligning the identified silence with the timeframe, and associated words spoken, allowed me as the researcher to explore a greater contextual meaning to the words and to enhance the analysis of this data.

Figure 11, below, shows an example of gaps in a spectrogram display, the silence between words, phases, or sentences of an interview participant in this research.

Figure 11

Spectrogram of serious speech, Richard.



As can be seen, there are clearly identifiable gaps in this spectrogram representation of an interview audio file from this research; this is combined with relatively flat tones and lack of shading in the mid-height area indicating a serious or even sad nature of the discussion. A spectrogram like this would warrant deeper investigation, and in a monolithic text-only environment, this would have remained invisible to the analytic process.

This provides another layer of analysis and creates an extra element to ethnography, to go beyond traditional, to include visual and audio ethnography, and create the utilisation of a multiple media ethnographic research analysis.

The spectrogram also became the visual medium to present the research participants' emotive speak in a text-based environment and not only enables the readers of this research to gain a greater insight regarding the interview participants' meanings embedded in the spoken words but also provides a validation of the researcher's interpretations. This bolsters reliability and provides a traceable verification of the analysis and findings in this element of the research, making for a stronger validation process

This research utilised the combined elements of interactive visual concordance in the IBM word tree, the TEMI system of time stamped audio and text, and the Audacity spectrogram graphical representation and audio system, providing a multiple media ethnographic research analytic process combining IVC, SER and IPA representations of the interview data gathered in this study. This proved not only an efficient use of time, it was also a very inexpensive means to undertake such analysis with an approximate cost of $30.00 AUD for the TEMI transcript services and the remaining systems being free. This is useful for the student researcher with limited funds and time available.

In the analysis of non-linguistic data gathered in this research, which were photographs of the observations, an IPA method of interpreting the images was utilised to support forming contextual meaning; this enhanced the observation activity analysis.

This process of using multiple lenses enables differing perspectives, for the intention of understanding the multiple views when analysing and correlating data (Fusch, et al., 2017).

The development of a written text based on combining forms of analysis and representation, such as IVC, SER, and IPA, including the position of the researcher, fits with research that embodies a range of methods and allows the researcher to include narratives with analysis. This type of analysis is similar to crystallisation, a creative analytical process that evolved from the feminist researchers who combined approaches and strategies (Ellingson, 2014).

Crystallisation

The analytical approach of crystallisation involves using a productive blend of multiple writing genres—narratives, reports, sketches—recordings, and photographs in analysing and representing the in-depth understanding (Ellingson, 2014), whilst enabling the researcher positionality to be evident in the narrative. This method allows the researcher to use multifarious ways of knowing, to make sense of the data. This, Richardson (2000), in Ellingson (2014), says is like looking through a crystal and the refractions that are created.

Crystallisation allows the emotional narrative to be recognised and included in the data analysis, emotion that may remain hidden in other research genres. Seeing these emotive discourses and discovering the power supplication (appealing to someone of authority), via crystallisation, allows the construction of themes and patterns. This also allows more than one way of expressing the data and the world.

Comparison of analysed data, completed using differing lenses, can engage an introspective analysis using crystallisation (Shagoury, 2011). Using narrative, retelling stories, personal stories, photos, and diagrams help present the actuality in the research to the audience.

Crystallisation analysis involves looking for what can be found in the text and transcripts, what can be found in the photos, what can be found in the recordings, what can be found in the researcher's knowledge and experience about this topic. It prompts questions: … What do they focus on? … What do they focus on as important? This helps our sensemaking, and this process can be expedited in a mini-ethnographic case study where the author has membership in the studied culture (Fusch et al., 2017).

In lieu of viewing the research data as an isolated phenomenon, this mini-ethnographic case study utilised an integrated and systematic means of studying the language, the text, the audio, and the non-lexical semiotic media—photographical and graphical representations. This multiple media ethnographic research analytic process leads to a greater identification of meaning and accuracy in analysis of the data (Çoşkun, 2015).

In this study, it resulted in the creation of a hybrid text, a hybrid representation of the original data and the author' s concordance analysis, via a process that creates a relationship between the original text and data, and the author' s intentions (see also Rockwell, 2001). In order to create validity in the process, I have explained how the resulting hybrid text was produced. This allows the reader to repeat and build on this process to create new understandings and to create a new text, while maintaining connection to the original (Rockwell, 2001).

Ethics and Limitations

Ethics

This research has ethics approval from Victoria University and follows the ethics guidelines regarding informed consent, storage of data, the de-identification of participants, and acknowledges that all participants are independent adults over the age of 18, therefore not in need of guardian consent. The ethics approval number for this research is HRE16-272.

Limitations

This research study is limited by a demographic element, being the lack of a female sample of low or non-qualified construction workers to participate in this research. At present, females working in the Australian construction industry make up only 2% of the construction industry workforce (State Government of Victoria, 2022). The inclusion of female construction workers may identify differing perspectives on RPL and group RPL processes. The research is also limited to a geographical area constrained by the Covid19 travel restrictions in place at the time of the observations, and therefore a national perspective was not obtained. As this research is specific to the construction industry, the generalisability of the findings may not transfer to other industries, or cohorts.

Chapter 4: Results

Introduction.

With the impending implementation of trade licensing in Victoria, Australia (State Government of Victoria, 2021), there is a need to create a suitable RPL process that aligns with the demography of the low or non-qualified construction worker.

The aim of this research was to investigate if a group RPL practice can influence this cohort to engage in the activity and hopefully meet the requirements of trade licensing and to continue working in the construction industry as qualified individuals, and hopefully follow Buddlemyer et al.'s (2012) findings and continue with lifelong learning and a raising of their social standing.

In the previous chapter I described the methods that were employed to gather the data and the processes used to draw out the findings and themes. In this chapter, I present the data from the interview conversations, the group RPL activity observations, and findings from a survey posted on social media

The presented findings related to:

- A social media survey in the context of the minimal participation of the invited cohort.
- Interviews, with examples of the IVC, SER, and IPA in data identification, aligning with the themes of assessor competence, acceptance of knowledge, the relationship between assessor and the candidate, and the concept of group RPL.

- The observations and the provision of context, of both the andragogical assessment environment, and the physical environment, with the use of IPA in the identification of data embedded in the photographs of the observation activities. This data was identified using a spatial analysis type of processing and aligning the observational notes with the image data in creating meaning (O'Brien, 2013; Weeks, 2001).

Pseudonyms have been used to ensure confidentiality of the research participants. All participant direct quotes from the interviews have been *italicised* and de-identified.

The resultant hybrid text is created utilising direct quotes from the transcribed text, the Interactive Visual Concordance along with the emotion identified in the audio recordings, and the spectrogram images, to ensure the presentation of the participants voice is authentic and unaltered. The dialogic representation of the observation activities is presented as a chronological description of the events. My narrative is intermingled with the representation of the data to provide an understanding of my interpretation of the interview and observational data. This supports the validity of the findings via a transparent pathway of discovery and provides contextuality of the identified event and alignment with the literature.

My Narrative on the Difficulties in Obtaining Research Participants.

My experiences in undertaking this research identified RPL as possibly being deemed too difficult and not valued, as the funding is too low, making the process and

compliance requirements inequitable. Most managers of registered training organisations I have talked with would rather enrol a person in the full qualification and provide consideration for their prior learning by reducing the course timelines to suit their identified level of prior experience and knowledge. This process attracts the full level of government funding and enables the operational sustainability of the subject to be maintained. My attempts to formally interview several registered training organisations were refused on the premise of the topic being too political and thus this investigation was viewed as a risk to the institution.

This reaction came from not only public registered training organisations but also private registered training organisations who would not even discuss the option of interviews unless I was willing to enrol in one of the courses and generate income for them. This is an example of commercialisation in education taking precedence over policy.

Below is a capture of a discussion with a major private registered training organisation and myself.

Welcome! How can we be of any assistance?

Researcher- I am researching RPL in the construction industry as part of my Doctoral studies.

Response - Let me check that for you. May I know who am I chatting with?

Researcher- My name is Rodger Carroll, is it possible to interview some staff and RPL candidates, all anonymous.

Response- To confirm, are you interested in enrolling?

Researcher- No not enrolling

Response- I do not have information for your studies but feel free to browse our site.

I made phone contact with a large provider of training and RPL to the construction industry; the staff said they would contact the CEO and discuss my research and that he would respond shortly.

Below is the response from the CEO and my subsequent reply.

Hey Rodger,

My name's ……., and I'm the CEO here at ……. I wanted to get in touch with you as I heard you were interested in studying with us at …….. It's a good move!

Getting to know passionate people like you, who can't wait to take the next step in their career - that's what excites me about what we do at ……..

Looking to take the next step in your career? Getting your Cert …. is a great call.

Our Certificate …… will help prepare you with the skills and knowledge for your …… registration and is a step towards owning your own business like many of our …… graduates.

Ready to get stuck into it, Rodger? Hit the link below and I'll get one of our course advisors to give you a call.

Cheers,

……

……CEO

Hello ……., Thank you for the email regarding courses at ….., however my communication with …… was in regard to my doctoral studies and the topic of RPL, and in particular undertaking group RPL activities. I was hoping to interview

some of your staff and to investigate options of group RPL, especially in light of the proposed licensing initiative by the VBA. Kind regards

There have since been 28 emails sent to me from this registered training organisation offering me various courses and the offer of discounts in enrolling in courses, however, no response to my request to interview their staff regarding recognition of prior learning practices.

This could be viewed as an example of the commercialisation of education, where I am not seen as an enquirer, but as a customer, a commodity, whose value is represented by my enrolment capacity, in my capacity to support the education institute's adherence to financial return (Cook & Petrina, 2005; Hussey & Smith, 2010; Rabidas, 2014).

I contacted the building construction area of a large government training provider in southeast Melbourne. The staff were very obliging and were happy to discuss and be research participants. They requested to take to research information to the director for confirmation and approval and I simply got a text message back from them saying my request was refused as the director deemed the research too political.

As I had no luck in obtaining permissions to observe RPL activity in Victoria, I conducted a desktop search that revealed 16 organisations in the South of Queensland, located in the northern part of Australia. There has been high activity in the practice of recognition of prior learning particularly from private registered training organisations in that state, so I commenced discussions with several of them and organised travel and accommodation for myself to meet them face-to-face and commence the process of interviewing research participants. Upon arrival to

Queensland, I visited many of the organisations I had identified during the desktop search only to find various points of refusal.

A particularly large training provider who specialises in the recognition of prior learning in the construction industry was initially interested, however it was a requirement that I obtain approval from the two directors/owners of the organisation. In an attempt to locate the offices of the directors I eventually found a nondescript building in Brisbane that was actually law offices and identified that the two directors/owners were in fact lawyers. They refused any form of contact with me and refused to be part of the research.

Continued contact with suitable organisations in Queensland led me to two training providers that specialise in training to the construction industry, and they were more than welcome to be willing research participants. After many phone calls and discussions regarding their practices and this research, we had planned group RPL activities in March 2020 and unfortunately this had to be abandoned due to the COVID19 pandemic and the restrictions that surrounded it.

This became an impediment to the data collection phase of this research for over 12 months, and the staff I was dealing with were no longer employed at these organisations and the organizations have not returned any of my emails or contact requests.

At this time, I decided to design a survey (Appendix 2) to gain views and opinions of RPL and the concept of Group RPL and post this online to my academic network of 277 people. The post requesting participation in the survey was viewed by 164 people. The survey was undertaken by one person. This almost non-existent rate of response is in line with the literature identifying RPL as extinct (Doutor & Lucio-Villegas, 2014). It also matched the responses from four of the five interview

participants in this study, and from my professional network of Tertiary and Further Education (TAFE) managers who inform that they do not offer RPL, they only enrol students in full units and provide consideration of time.

Survey Response and Survey Analysis

Analysis of the single, anonymous respondent's answers and comments in the survey are considered as an individual comment and not a collective of survey responses providing weighting or a sense of overall feeling regarding RPL. Nevertheless, the responses do concur with literature and data collected within this study. The non-engagement with the survey by the 163 people who viewed the survey does however add weight and alignment to the concept that RPL is extinct (Doutor & Lucio-Villegas, 2014) and that RPL has declined since 2013 in Australia (Osborne & Serich, 2020).

The survey response to the question regarding power in the assessment activity, "*as an assessor. A very large amount",* aligns with Hamer's (2010, 2011), findings that the candidate can be rendered powerless.

Accessing the interview transcript data from this research and using IVC analysis, the survey response of, "*I think if you are assessing someone it should be done individually as the skills and knowledge need to be determined. In a group some people may not demonstrate the skills and knowledge",* is addressed by the narratives of the interview participants in this study, which were:

- *Being able to assess as an individual, applying assessments to door hanging for example, it is done individually in industry, so we assess it individually here.*
- *Tasks like "setting out" are carried out in industry as a team, so it's logical to assess in the same way.*

- *The assessor observes what they choose to do as a group, in a social context, whether all individuals do the actual calculation or whether they just stand and hand the tools, that's how you would sort of look at it in a group, each individual doing a particular activity. So, you also assess them based on their, what they're doing and if they're participating enough.*
- This is supported by Harris' (1999) concept of trojan horse RPL and the inclusion of social contexts and social practices, along with the South African research regarding RPL of farm hands including group situations (Deller, 2020).

The respondent commented that there is the (unadhered-to) requirement for a range of assessment options to allow the candidate to demonstrate their skills and knowledge through diverse means and this reflects the lack of varied assessment methodologies capable of responding to marginalised groups (Hamer, 2010, 2011). It also concurs with Ker's (2017) research in New Zealand Otago Polytechnic, which has designed its assessment program to be flexible to include cultural differences and has implemented a requirement that the facilitator works effectively with participants from varied cultural backgrounds, with Māori, in particular, not confined to a rigid and pre-determined framework (Ker, 2017).

Interviews

Using my network in education and the construction industry I was able to source interview participants as per the homogenous sampling profile.

Each of the interviews were conducted at the preferred location of the interview participant. These were recorded with permission and were approximately one to two hours of duration. A semi-structured interview plan was utilised to guide the conversation, although the participants were not prohibited from expanding and extending conversations that were within the field of the research, education, industry, and their personal experiences.

These interviews provided data to lead the observation phase of this research.

The interview participants were selected via the homogenous purposive sampling activity of this research. The sampling profile was for persons who have experience in the construction industry and the education industry with the exception of one participant who was chosen due to their extensive RPL experience in many industries, including RPL in the construction industry.

This targeted homogenous purposive sampling was to ensure the participants were within the demographic boundary of the research. The interview data presented in this study utilises pseudonyms to de-identify the interview participants.

Neil

Neil is a construction trade teacher of approximately 55 years of age. He commenced in the construction industry when he was 15 years old. He has over 20 years full-time in the construction industry followed by 20 years teaching and assessing trades in a major metropolitan Tertiary and Further Education (TAFE) institute, whilst maintaining industry currency via undertaking construction work when not undertaking educational and assessment duties.

Over a two hour and twenty-six-minute timeframe, Neil provided some colourful examples of life as a tradesperson and a teacher mixed with some examples of positive RPL practice and negative examples of RPL practice.

Our discussions raised over 100 comments regarding RPL (please see Appendix 3). Neil provided real examples regarding the use of language in an RPL situation with some people in the construction trades, and how confusing it can be.

"Most people would read the training package and look at it and go, what the hell is this stuff?"

Neil presents discourse regarding the Vocational teacher/assessor and the mandatory teaching and assessment qualifications of Certificate IV in Training and Assessment and the Diploma of Training and Assessment that include training on how to unpack a training package.

"Why is it written in such a way that we actually have to go and learn how to read it. Yeah, how to unpack it. So why don't they write it in a much simpler form, which is not hard. Right. So that's clearly understandable. Giving it to the candidate so that its simple for him to understand. I think takes a lot of the pressure off that it's not as alien as he thinks it's going to be."

He says the first thing to do is to explain the training package unit by unit, to allow the candidate an understanding of each unit. It is only then that the candidate can relate their history to each unit. He states me that it is important to use a "tools language" and not an educational language and to provide a safe environment off the job where the candidate's head can be clear and not distracted by work and employment commitments.

Continuing with the training package dialogue, Neil explains the training package has become too prescriptive, rendering unachievable the implementation of flexibility and contextualisation, to suit the differing circumstances of the individual. Neil

presented requirements of the training package that are outdated and mostly inexistent in current industry. An example of this is the use of spray equipment to apply paints, a unit in the Painting qualification that is located within the construction Industry Training Package. The elements and performance criteria ask for "demonstrated use of an Airless spray gun, a High-Volume Low Pressure (HVLP) spray gun and a High-Pressure spray gun. "

Some of them will have used to HVLP. No one ever uses a high-pressure gun anymore. It's just not. And it talks about pressure pots. Well, they went out with the Ark"

Neil explains, you can perform well in the industry and carry out high quality work, however you would not be granted RPL for this unit, as you cannot demonstrate the use of outdated technology, as per the performance criteria outlined within the competency unit. This increase in the precision of outcomes has led to the acquisition of narrow skill sets, in lieu of a broad and transportable identity of applicable knowledge and skills, and rendered Competency Based Training (CBT) subject to a degree of inflexibility and lack of adaptiveness in responding to a rapidly changing environment (Allais et al., 2014).

In response to a question regarding experience in a group RPL activity, Neil responded that several years ago, prior to the reduction in funding, he carried out a series of small group RPL activities regarding mature construction industry workers to determine their capacity, and to identify the gaps in their skills and knowledge, with the subsequent gap being addressed via customised training so the worker could be awarded a Certificate III qualification. This involved individual activities in pairs or small group settings, with individual knowledge discussions and questioning. Neil verbalised his views:

"*probably, looking back would've been very easy just to do the two of them in the interview process right from the word go, would have been a lot easier. And I think they would have probably been a lot more relaxed too."*

The question arises within the interview, "would RPL in a teams environment be more attractive to a male in the construction industry?"

"I think it would be, look I know when we've got a go and do things here even myself. I find it a lot easier if three or four of us are going to go out and do it. Yeah, I think, I think from the, the candidate's perspective, they would, I think they would be a lot more comfortable in a team environment".

Creating discussion at the level of the candidate is a method Neil utilised to give confidence and show he cared about the candidate. Further investigation through the interview transcript identified further demonstrations of care and support for people to have positive experiences in education and assessment.

Utilising the designed multiple media analysis process of this research, a search of the spectrogram graphical representation confirmed the context of the identified words, phrases, and sentences in the transcribed text. The IPA identified chronological segments that were markedly differing from the average spectrogram representation of this interview audio recording (please see Appendix 4).

This process identified a series of blank spaces, indicating silence, and flattened tones indicating negative, stressful, or sad emotive discourse (see Appendix 5).

Aligning this with the SER and the IVC, confirm his discourse regarding a very difficult student and the student's personal circumstantial influences on his behavioural issues. The corresponding TEMI analysis combines the audio in confirming the tone and emotion in the spoken voice and the immediate surrounding words (Appendix 6).

The hybrid process of utilising the IVC provides further analysis through locating the identified lexical stream, and a series of similar word streams and the location within the text (Appendix 7).

The related discourse regarding this difficult student identifies a very positive outcome for the student as a result of Neil's disposition, actions and assistance, and with his interaction with this student, a positive attribute of an RPL assessor (Wheelahan et al., 2003), (Guðmundsdóttir & Lárusdóttir, 2017; Hamer, 2010).

The location of the parallel spectrogram presents a significant tonal differentiation along the chronological capture of this narrated lived experience (Appendix 8). The IPA of the spectrogram (Appendix 8) shows a relatively flat tone and almost robotic word delivery with a clear identified change of tone and amplitude in the discourse at approximately the 45% increment of the image chronology. This change coincides with Neil's description detailing a positive outcome with this student. The SER presents a distinctive change in tone, and I can hear Neil change from a serious discourse to a happy and lively discursive manner.

This hybrid analysis provided critical, contextual findings in this research that may have remained invisible within the rhetoric of a text only analysis and provided a visual representation of authentic emotions and meanings entwined within the interview discourse.

The current state of RPL in Victoria has suffered from the compliance requirements and the funding model being low. This has resulted in many institutes, including the institute where Neil teaches and assesses, not having a mechanism to be able to offer RPL to the construction industry.

"at the moment we can't do it, which is sad, and we get quite a few phone calls".

Ross

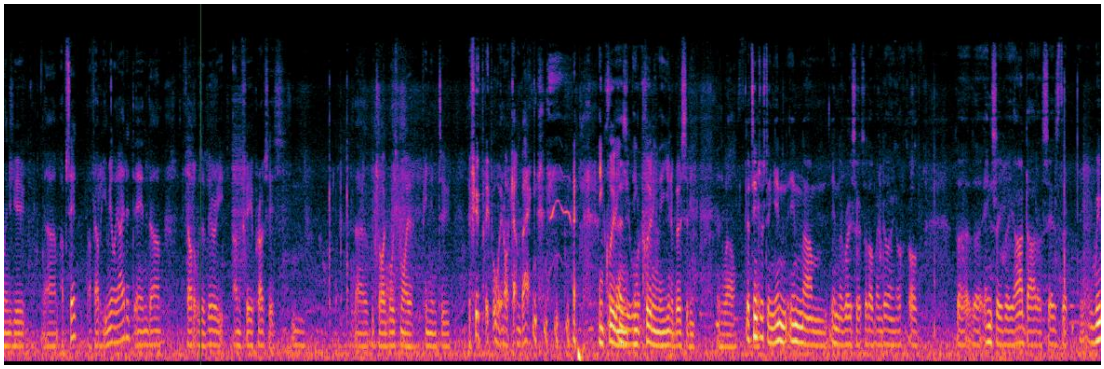
Ross has a professional background in construction and teaches para-professional courses at a major metropolitan TAFE institute. He is approximately 50 years old and possesses a varied range of experiences in several industries. He possesses experience in RPL as an assessor and as a candidate.

The interview process with Ross resulted in over 100 comments regarding RPL (see Appendix 9).

Our discussion uncovered some very positive examples of Ross as an assessor, and of Ross as a candidate. The interview and discussion also brought to the surface a very negative experience of RPL for Ross as a RPL candidate. His language, and tone, painted a very distressing picture of this experience as a RPL candidate. This impact of a negative RPL experience, even on a person with professional qualifications, are clearly visible in the anomalies in the spectrogram representation via IPA (Figure 12 below).

Figure 12

Spectrogram Ross

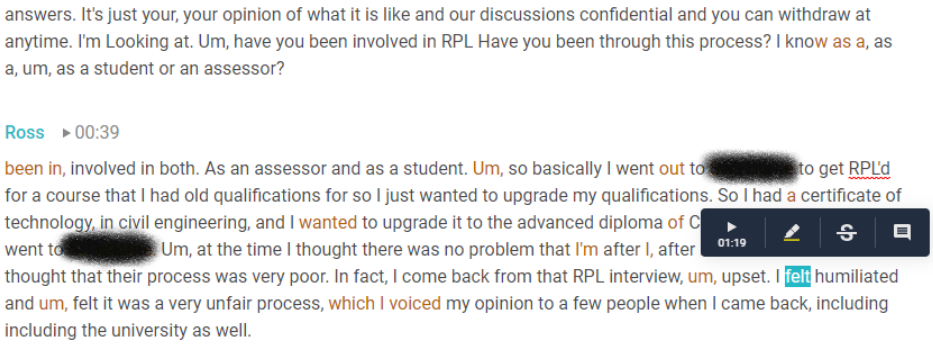


The first 40% displays lower tonal indicators and an unusual pattern at mid-point of the chronological display. This identified the irregularity in the spectrogram as a

discourse regarding the negative RPL experience. Identifying this element within the SER confirms an auditory event related to a narration of a negative RPL experience in his history (Figure 13 below).

Figure 13

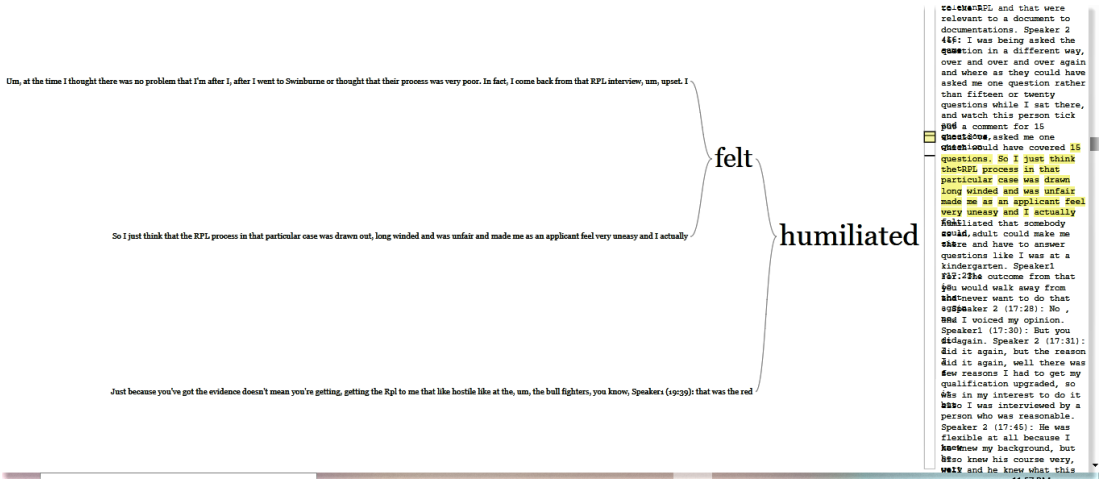
IVC Ross



Combining the IVC analytic process with the SER data identifies further instances of Ross explaining his experience of RPL, as a participant, as humiliating (Figure 14 below).

Figure 14

TEMI Ross



At several points throughout this interview, spanning fifty-four minutes, Ross used the word humiliating three times along with other collocated lexemes to portray a negative experience such as, unfair, unreasonable, and the use of the word "kindergarten" in a repurpose of the word to portray being treated like a child.

"I come back from that RPL interview, um, upset. I felt humiliated and um, felt it was a very unfair process"

"I was being asked the same question in a different way, over and over and over again and whereas they could have asked me one question rather than fifteen or twenty questions while I sat there and watch this person tick and put a comment for 15 questions, should've asked me one question which would have covered 15 questions. So I just think that the RPL process in that particular case was drawn out, long winded and was unfair and made me as an applicant feel very uneasy and I actually felt humiliated that somebody could, as an adult could make me sit there and have to answer questions like I was at a kindergarten".

"yeah because it humiliated me and I thought, I've been in this profession for all of this time and told that no, you're gonna have to start your qualification again. And I was like, this can't be right. It's not right. So the person was totally unreasonable because they had an academic tick the box quality, they were looking at it from quality. If I get audited on this RPL, is my paperwork going to pass an audit. And to me, that's not RPL."

These quotes present in the passive voice. Passivity in sentence composition can be classified with reactivity, to unpleasant things or events (Zaborowski, 2018). The gaps in the spectrogram (Figure 12) identified elements of silence, although they were unrelated to a thought process due to the passiveness of sentence structures, as described by Zaborowski. The pattern aligns with the work of Lüdtke and Jacobs (2015), who argue that a longer chronology in speech containing low pleasure adjectives is related to longer reaction times for our minds to process emotional words and to create a negative affectivity in the narrative.

This hybrid analysis combined with a linguistic analysis of word choice and sentence structures, provides trust in the interpretation and presentation of data.

In the positive example of being an RPL candidate, Ross described a very rigorous process, however a reasonable and just process. These entailed discussions guided by the RPL assessor who was qualified and experienced in the discipline and in education and had the characteristics of positivity and a drive to give the candidate the best possible option to achieve success, which is identified as optimal by the literature (Guðmundsdóttir & Lárusdóttir, 2017; Hamer, 2010; Wheelahan. et al., 2003).

"he said, we're going to get this right because if you can't get it right, you're not going to get your qualification and I'm gonna have to do it again. It's a waste the time. Right? Yeah. So he was pretty strict on me making sure I had everything."

Ross maintains a positive discourse of this experience and presents this positive assessor as someone who knew what they wanted as evidence for the RPL, in contrast to his negative experience in RPL where the assessors just had a series of questions.

He presented an example of the difficulties of poor language skills and the difficulty that people may have in verbalising what they can do. Ross presents a student in his class on timber structures.

"*He's a, he's a chippy working outside for many years, in class when I ask him questions, he struggles. He would not pass the RPL process".*

The student requested assistance and during discussions provided Ross with photos of his work in industry over many years.

" He said that's what I do at work. I said but I asked you in class and you couldn't answer me. I said, here's the evidence that you can actually do it. So here's a guy who's actual communication skills, weren't as good as what they possibly should have been"

Over the many years of teaching and assessing Ross believes this is not an isolated problem.

"And this is a problem with a lot of guys who just, Eh, eh not that good in in communication skills. Yeah. So they're not failing because they can't do it, they are failing because of their communication skills".

In this situation the candidate may possess the knowledge and skills, but if they can't verbalise it, if they can't discuss it and talk about it because they're too scared or they haven't got the use of language to be able to explain to an assessor, they fail, and that could be devastating to some people, as is evident by the suicide rate within the construction industry and the research being conducted regarding this (ABS, 2017Heller et al., 2007; Inoue et al., 2007; King & Lamontagne, 2021; Milner et al., 2008; Milner et al., 2017; Yur'yev et al., 2011).

The interview discourse with Ross presented an issue with the training package that parallels the investigative discussion with Neil, the previous interview participant presented in this chapter. The duplicated issue is that of the training package requiring evidential use of outdated practice and technology. Ross presents that engineering standards and codes are designed and written for change, allowing for emergent technologies, however, the training package prescribes technology that may be outdated and renders the RPL candidate non-compliant in meeting the critical aspects of evidence and performance criteria as presented in the research by Allais et al. (2014) regarding the inflexibility of the training package.

"what we're saying is we've got all these codes and these standards to allow us to do it, but you can't get qualified mate because you're, you're using the latest technology but you should be using old technologies so you can get as what's in the training package"

Ross expressed concern regarding the possible effectiveness of a group RPL process in the context of civil engineering and the validity of an individual's assessments conducted as a group, however, he provided positive comments on the

group aspect of discussion, the process that the assessor could employ in preparing for a group RPL discussion and in preparing the RPL candidates for the RPL environment in a similar manner to preparing learners for assessment. and preparation for individual assessment.

Richard,

Richard works for a large government registered training organisation (RTO), that specialises in assessment activities across twenty-five disciplines, including construction.

RPL terminology was prevalent approximately 50 times during our thirty-seven-minute interview discussion. (Appendix 10).

He discussed the qualities he looks for in a prospective assessor, and the qualities he expects from the assessors that he manages. He refers to these not as assessors, but as mentors to the candidates, enabling the assessor and the candidate to take the journey of RPL together, as presented in the research by Wheelahan et al. (2003), Hamer (2010) and Guðmundsdóttir and Lárusdóttir (2017).

Appendix 11 presents a heightened tone and amplitude, indicating an excited emotive response from the interview participant. In this case Richard was proudly talking about his family. In the IVC identification of his family values, the analysis determines it continues over four frames of discussion (Appendix 12).

The relevance to this research is that this can identify him as likely to provide care and assistance for the candidate, a positive quality in an RPL assessor (Guðmundsdóttir & Lárusdóttir, 2017; Wheelahan et al., 2003).

Regarding the concept of group based RPL, Richard responded that he had not thought about it, however, the discussion triggered his memory of studying at university and being a member of a collegiate group and bouncing ideas off each other. He then posed the question, is that a way we should be looking at RPL?

The discussion expanded on this concept of group RPL, and his view was to commit to a range of individual assessments to provide individual feedback, validate individual knowledge, and the allocation of competencies.

This process could be supported by the formation of a candidate group and may alleviate the fear some people have of the RPL process.

"it's a matter of us taking away the barriers that they have and the fear that they've got"

The hybrid IVC, SER and IPA process identifies the context of a discussion regarding a group RPL process. The IVC identified the lexical threads and the position withing the transcript. The correlating chronological location spectrogram shows a clear emotional excitement via the tonal changes.
The following sequential figures show the IVC, SER, and IPA captures (Appendices 13,14,15).

The spectrogram (Appendix 15) presented a clear change in tone and intensity in the discourse. This aligns with the interview participant's realisation that a group RPL process may be a possible, and a positive application for a distinct cohort he had identified. The heightened tone and intensity indicate a high emotive state of

discourse and provide a validation of the analysis identified in this research (Franzoni et al., 2020; Hue, 2015; Mokharti, Clark & Henriss-Anderssen, 2013; Pinkowski, 1997).

"So, we're actually going to do that with three guys together. So, we'd bring them in together and talk to them together. But then individually we have to spend time with and say, this is what you need. And the reason we've done that for us, because we've got a guy who's an older guy and he's very intimidated about studying or going to school and we're saying to him, listen, this is not school, you know, he's worried about getting on computers and that. So because him with a couple of other guys who are younger, they're actually helping him out. So altogether they're doing this together as a team, that's a classic example of what you're talking about".

When discussing the power relationship between the candidate and the assessor, the interviewee responded that his organisation views the relationship as a partnership.

"We view it as a partnership. So they both got just as much power as each other. We don't see it as a hierarchal system. Anyone higher than the other, it's actually a partnership because the assessor will lead the candidate through saying this is what we need. What have you got? And the candidate would be able to supply that information, but then the candidate will gather confidence throughout the process and say, look, I did this when I was younger. What about this? Can I put this in here as well? And the assessor will be there as a mentor, but also a guide to take them through the process. So I see it as a partnership between the candidate, the learner, and the assessor who's there to take them through the journey together".

It is interesting to note that Richard referred to the candidate as a learner, as presented in the literature review of this research by Cameron and Miller (2004), who contend that theories of learning and development are probably not implemented in the practice of RPL, and the conversational model presented by Hamer (2010).

Owen

Owen is a teacher in a large metropolitan TAFE. He possesses many years of experience of RPL for Certificate III level in the construction industry.

He explains the process that was developed at one of the teaching institutes he was employed in approximately 10-15 years ago, where they developed a RPL kit. The kit provided information and instructions about the RPL process and what was required of the candidate. The candidate could supply whatever was relevant to the qualification and anything important to the candidate—there was a very broad set of criteria regarding information to populate this simple portfolio.

The assessor would view this initial document and would undertake a mapping of the items in the portfolio against the construction training package. This initial assessment provided the assessor with an indication of the candidate's understanding of the field of construction and the motivation of the candidate to undertake the full RPL process.

Owen believed this also gave the candidate an indication of what evidence is acceptable and gave the assessor an indication if the candidate was committed to invest in the RPL process. He said if the candidate was not prepared to invest in the RPL process, then neither would the assessor.

After the initial portfolio submission, the candidate is provided feedback, either acceptance into the RPL process, or whether further information is required. Owen said he would offer the potential candidate an option to meet at the institute for an interview where Owen would ask questions about the construction industry and the type of work the potential candidate was doing.

This led to a series of technical questions regarding the identified tasks and provided the assessor with a level of the potential candidate's knowledge and motivation to undertake the RPL process.

The candidates were decided to continue with the process were allocated to a group, and the process resembled a class teaching environment, however the assessments were all individual. Aligned with this was gap training, to teach the elements missing from the RPL assessment. In this process, which Owen describes as occurring concurrently with the RPL process, while the candidate is gathering evidence for identified units, they are attending a learning environment for the units that they have self-identified, or the assessor has identified, as missing. When asked if he conceived the RPL candidates as learners and taught them, he replied.

"Well, we did, we did it depending if I needed to do training, we taught them to a point. then we gave them the assessment. If they are only doing the assessment, they just got the assessment. Yep. Yep. But but pretty much a classroom situation".

In the excerpt of Owen's interview above, the use of the word's candidate, student, or learner, are replaced with the words of they, and them.

Owen identifies a high completion rate over the six years the program was running. There was also the identification that nobody obtained the full qualification via RPL; there was always the addition of gap training to achieve the qualification.

This process ceased when the compliance regulations increased and the funding model changed, and a decrease in the government funding created a perception that RPL was financially non-viable for the institute.

The fifty-three-minute semi-structured interview with Owen resulted in approximately 50 instances of the words RPL being embedded (Appendix 16).

Investigation of the interview transcript concludes that Owens's use of descriptive words when referring to candidates, students, and learners were as follows.

- Candidate 0
- Student 0
- Learner 0
- Them 79
- They 59

The Hybrid analysis process identified a low emotive instance regarding his experience as a candidate in a RPL process. This experience was related to the institute that Owen was employed at when implementing the decision to ensure all teachers and assessors had the latest qualification. This was to be conducted under an RPL and gap training arrangement with an independent institute to ensure any conflict of interest could be mitigated.

Owen informed me that because of the RPL activity he had some upskilling to complete. I asked if this RPL experience was stressful, and he replied,

Yeah, because they were pretty strict with it.
That was pretty scary to have the boot on the other foot.

This discourse, as reflected in the Spectrogram (Appendix 17), presents a flatter tone to other parts of the interview, confirming the emotional connections to the conversation.

The analysis also discovered heightened emotive speak regarding a positive process as an RPL candidate. The Spectrogram (Appendix 18) representation confirms responses linked with personal success and comfort in the process and experience of the event.

This process was related to an RPL activity for obtaining a Diploma of Vocational Education that Owen indicated was entirely via portfolio and did not include any practical assessments or interviews, a process that Owen describes as non-stressful.

The interview ended with Owen commenting on RPL and the concept of group RPL.

"it's gotta be a process, however you decide to run it. Yeah. Some sort of a process. And I liked the idea of the group thing, you know, that's a good way of doing it. I think it grows confidence"
"You are approaching that issue of, you know, like people being frightened of undertaking that stuff. If you can present something to them, that's attractive to them and that they are confident in undertaking RPL."

David

As a male construction assessor at a large metropolitan TAFE, David possesses long term experience in the construction industry, and in education. With continuous involvement in the construction industry in parallel to the secondary school system and in the Tertiary and Further Education system, David continues to teach and assess predominantly in the workplace environment.

The interview drew out elements of best practice that could possibly be included in an optimal RPL process. The interview discussions generated approximately 50 instances of RPL terminology (Appendix 19).

David talked about his experience and the strategies he has utilised over his years of assessing. To assist the candidate to gain a conceptual understanding of the assessment tasks, he incorporates photos and sketches into the instructions and information for the candidate. He talked of the importance of a learning element in RPL activities, for example, how to write a report or how to create a portfolio.

"*Now, the preparation is important because they've got the knowledge, they got the practical, but they don't have that prep skill to put it together. That's to show what's required".*

David comments on how a learning environment creates a friendlier context and can engage the RPL candidate, similar to the findings in the research undertaken by Harris (1999).

Assessments should be conducted as per industry practice. Our discussion expanded to provide group assessments for tasks that are undertaken in industry requiring greater than a singular person to complete. An example of this is "setting out", a process that creates the boundaries of the structure being created, this set-out provides positioning of footing structures being slab, or stumps or a range of footing systems. The assessment of this task in an RPL environment should parallel the industry practice and be conducted as a group RPL assessment activity. Tasks that are carried out as an individual in industry, for example hanging a door, should be carried out as an individual assessment in the RPL activity.

David also allows the candidates to choose a construction product and/or activity so the candidate can feel comfortable and confident, providing the best chance for the RPL candidate to show the assessor their abilities. This provides an example of an accommodating assessor, rather than expecting the candidate to fit the assessor's construct as described in Hamer (2009).

The discourse was directed towards the creation of a non-threatening environment, a non-assessed environment, removing stress of judgement for the candidate. This can be utilised to prepare the candidate in a friendly environment, that David termed a "*learning hub",* containing examples, information, and assistance. This hub could allow the candidates to test themselves and determine their knowledge without the risk

of failure. The knowledge assessments could be multiple choice, providing the opportunity for the candidate to see the question and the range of answers.

"it's important that they have the answers available for them to put the two together. Now they can do that as a group. The answers can be done as a group being presented at the time of learning. And I would feel more comfortable in that presentation".

This multiple-choice questioning could act as a cognitive artifact for the candidate, an example of an external representation of distributed cognition (Zhang, 1997), (Zhang & Norman, 1994), along with the social distribution of cognition (Michaelian & Sutton, 2013).

David was one of the observation participants in this research and was the assessor conducting a planned group assessment activity. I observed that he displayed a calm and discursive behaviour that made the candidates comfortable.

Past Fraudulent RPL Practice

In the interview transcript data of the participants, an IVC analysis of the data identified a section of text identifying an example of unscrupulous RPL activity as described by the interview participant. Appendix 20 shows the lexical streams and the highlighted chronological positioning within the transcript text.

Further hybrid analysis provides a SER identification of the discourse and the audio tone and wording utilised in describing the RPL event (Appendix 21)

The first spectrogram (Appendix 22) displays a reduced tone and intensity that flows into the second spectrogram (Appendix 23), which presents a continuation of this tone

and intensity with a distinct change at approximately 1/3 of the way through the chronological frame.

The change from a reduced tone and amplitude to a heightened frequency and amplitude coincides with the initial serious discourse, introducing the questionable RPL activity and the feelings of anger and amazement presented in the final two thirds of the second spectrogram (Appendix 23). The text shows that a major registered training organisation was offering recognition of prior learning services to tradespeople who already held a previous version of the same qualification.

This RPL activity was to provide the latest version of the qualification; however, it was not a requirement of their employment or a skills requirement in the industry. This registered training organisation would simply come to your house, view your previous qualification, and ask you to sign the recognition of prior learning document.

This attracted a cash payment to you of $3000, which became the main reason there were over 45 tradespeople undertaking this scheme. The registered training provider, for this short visit to you and the payment of $3000, received approximately $12,000 funding per RPL candidate from the government.

When RPL attracted full government funding, the same dollar amount as a full teaching program, some providers, both public and private, abused the system for a quick monetary gain.

In response to these abuses of the recognition of prior learning system, the government implemented a funding reduction. Recognition of prior learning activities now attract 25% of the government-funded rate for the appropriate qualification. Aligned to this was the introduction of complex and comprehensive compliance

requirements, resulting in many registered training providers deeming the concepts of recognition of prior learning as being non-viable and too difficult.

Reading the above authentic text derived from the interview data in conjunction with viewing the spectrogram visual representation, enables the reader of this research to gain a context and to comprehend the emotions associated with the interview participants' telling of their RPL activity (Franzoni et al., 2020; Pinkowski, 1997). Thoughts and words regarding the past are a re-configuration of memory, both truth and fictitious, mixed to create the meaning conveyed (Ricoeur, 1988), the inclusion of a multiple media analysis, as utilised in this study, identifies the emotion attached to the words and meaning conveyed, presenting an authentic analysis and validity to the interview participants' narratives.

Further communications with the interview participants led to discussions with registered training providers in Melbourne that provide training to the construction industry This resulted in responses that they were happy to be part of the research and led to the organisation of group assessment activities that I could observe as part of the data collection in this research. The data gathered was from Certificate III level groups, and also involved individual recognition activities in the construction industry with participants of various backgrounds, and ethnicity and age.

Observation 1

Context

This observation activity consisted of four candidates undertaking a practical assessment in construction. Each candidate was undertaking an individual assessment;

however, this was conducted in a group environment. This environment commenced with an introduction to the assessor and between the candidates themselves.

The candidates were from varied backgrounds and nationalities; however, the commonality is that they were all males and aged between 26 and 30 years old. As the percentage of females to males in the construction industry is relatively low, it is difficult to source female RPL candidates in the construction industry to achieve a gender balance. This creates a limitation to the study as the observation data gathered is from a male only perspective.

The candidates had been provided only an indication of the activities that they would be undertaking as part of this assessment prior to today's activity and a complete document was provided in hard copy on this day of assessment activity. It is a requirement that the document be handed back to the assessor at the end of the assessment activity.

The document contains the detailed process of assessment and the plans the candidate will use for the construction activity and a set of rules regarding the assessment activity including asking other candidates for assistance with your activity.

The assessor followed an assessor record book that detailed the information given to the candidates, an overview of the assessment tasks, a timeline of the assessment activity (similar to a lesson plan) and a protocol for the assessor to follow, for example, placing the candidates at ease, ensuring safety, supporting candidates with special needs. This document also contained the assessment rubric to be checked off for each candidate, and this checklist had the provision for photographs of the candidate's practical assessment activity to be added to the relevant topic.

The design of this assessment checklist is to determine if the candidate can execute the specified work to the occupational standard. The mix of theoretical testing and practical testing is combined to provide a holistic execution of the assessment activity. This creates authenticity of the assessment in regard to the industry standards and provides the candidates with an assessment activity that is familiar to them in their work environment. This functional analysis of the occupation and workplace in designing this assessment checklist creates an industry validation of the assessment process.

Allais et al. (2014) state that this practice of occupational assessment allows for assessors to observe performance in a real workplace or simulated workplace environment, and therefore creates a separation of the certification activity from the teaching and assessment model, the Competency Based Training (CBT) model utilised in vocational education in Australia and throughout many parts of the world.

This model of authentic observation utilises industry experienced and licensed assessors in order to maintain an acceptable standard of judgement regarding the validation of the candidate's industry, and workplace performance.

The assessment activity was a cluster of three domains. The three domains were based on how the person successfully works within the construction industry and consists of,

- Construction skills as a domain: The candidate's selection and use of equipment, and the candidates process of construction and assembly.
- Professionalism as a domain: The time management of the candidate, their effective communication, and their ability to follow instructions.

- Work health and safety combined with sustainability and planning, being categorised into a single domain: The candidate's ability to perform calculations, to follow the plans and specifications, the ability to work sustainably, and the candidate's ability to work safely.

This aligns with common practice in accredited disciplines such as engineering. Engineers Australia in their accreditation process implement not only engineering skills but also look at graduate attributes and societal commitment with examples including ethics, lifelong learning, environment and sustainability, and the engineer and society (International Engineers Alliance, 2013).

The activity was conducted in a large workshop with an equal amount of floor space, approximately six metres times six metres, allocated to each individual candidate inclusive of an individual cutting area (Appendix 24).

Specific machinery used to undertake the activity was also included for each candidate, these being drop saws, nail guns, circular saws, and a very wide range of hand tools. Each piece of equipment was of the exact same brand and model for all the candidates. All the equipment was in very good working order.

It was a requirement that each candidate bring with them to the activity the appropriate personal protective equipment, being safety boots, safety glasses, and hearing protection.

The assessor allowed time for questions and discussion prior to formally commencing the activity.

After 15 minutes of introduction and discussion regarding the assessment task, the candidates were handed a paper-based knowledge assessment that was assessing the

planning knowledge and work health and safety knowledge. Each candidate was required to submit to the assessor a safe working method statement to ensure that they understood safety and were operating within the workplace safety requirements prior to commencing any practical work on the assessment.

The first element of the assessment was to set out the structure they were to build. The assessment was reduced to a series of processes aligned to building in the construction industry. This chronologically segmented series of tasks was to allow for the assessor to conduct an interim assessment and provide the candidate structured and constructive feedback.

The assessor utilised the assessment rubric on a tablet that allowed the assessor to upload the score allocated to the task, the assessor comments related to that assessment task, and photos of the candidate's practical work.

While the assessor was conducting the interim assessment of the practical component, the candidates were given a paper-based knowledge assessment relevant to the next phase of the construction activity.

The overall assessment activity is allocated a timeframe of seven hours, not inclusive of the 45-minute lunch break.

At the completion of the practical assessment activity, the candidates complete their final knowledge-based assessment while the assessor undertakes a final assessment of the practical work completed.

After this, the assessor instructs the candidates to safely dismantle and demolish the structures they have constructed as part of this assessment activity, and to ensure all

tools and equipment are packed away and that all materials, timber, etc., are stacked appropriately.

As this is clearly an assessment activity, the assessor maintained a diligent adherence to the assessment requirements and evidence requirements throughout the activity. When this was complete, the assessor debriefed the four candidates as a group, providing positive feedback and informing the group that individual assessment scores and feedback would be sent to them via email in approximately two weeks and that it is possible for further discussion post receiving the results and feedback. This is also to ensure privacy and confidentiality for each individual candidate.

Observations and Interpretations

The research observation checklist of descriptive categories was used to identify the characteristics of the assessor, and how they are prepared, whether they are fair and equitable, and are accommodating and create an inclusive environment (Appendix 2).

When I arrived at the assessment activity to collect observation data as part of this research, the main assessor and an assistant assessor were present and ensuring a correct setup of equipment and materials. Three of the four candidates arrived at the specified time and introduced themselves to the assessor who diligently checked the booking and requested proof of identification for each candidate, after which the candidates introduced themselves to each other and had casual conversations. Approximately five minutes later the final candidate arrived and underwent the same procedure with the main assessor.

Candidates were introduced to the assessment activity and provided the data and documents required and the rules of assessment were explained. The assessor then asked if there were any questions in response to which one candidate asked if they would be receiving the results on that day. The main assessor replied “no, the results will be approximately in a weeks’ time”.

When questioning the assessor as to why the candidates were not provided with a set of plans and instructions prior to the assessment activity, he replied that they wanted to see how quickly the candidates could think and plan and undertake the practical assessment.

The assessor possessed a quality that put the candidates at ease, I observed that he was very approachable, calm, and very happy to explain and answer questions to ensure that each candidate had the correct information and possibly to reduce any stresses that the candidate was feeling.

As the activity commenced the candidates diligently undertook their first knowledge assessment activity and safe working method statement. Each candidate remained in their delegated area and did not look at any other candidate while they were completing this knowledge assessment. At the completion of this assessment the candidates would present the document to the main assessor who informed them to sit quietly while he checked the safe working method statement. When the safe working method statement was deemed to be sufficient, the candidate was allowed to commence the practical activity.

As this is clearly an assessment activity, and not a learning activity, the assessor remained predominantly observant, however he did seem to offer advice to re-read the

plans, check the measurements, and ask questions if the candidate required clarification.

The assessor showed great care and respect for the candidates whilst maintaining an adherence to the assessment and evidence requirements as such attitudes in the assessor were found to be contributing factors to a positive RPL experience (Guðmundsdóttir & Lárusdóttir, 2017; Wheelahan et al., 2003).

As the candidates went about their individual practical assessment task, I noticed instances where the candidates would lend tools to another candidate for a short time, for example a chalk line used in the setting out process. The candidates seemed to be confident and progressing well at this stage, however three of the candidates could be observed looking occasionally at the other candidates' progress whilst one candidate did not look at any of the others and only concentrated on his task.

This behaviour may stem from a lack of confidence in their ability, or just simply validating their individual progress against the others in the group, to pace their activities and not be left behind.

At several times throughout the day of activity, candidates confirmed information and instructions with the assessor. The assessor predominantly left the candidates alone. However, he positively stepped in and interrupted the candidate if he made a glaring mistake and, whilst not offering a solution, he asked the candidate to re-read the plans and check the measurements to make sure he was doing the activity correctly. The main assessor was observed to care about the candidates and to provide them the best possible chance of success.

At about the two-hour mark into the assessment activity, I observed the candidate's confirming information from each other, not assisting but confirming plans and measurements.

Of the four candidates present, there remained one candidate, who did not look at the others' work or progress and remained focused and concentrated on his individual activity. The remaining three candidates that were looking at each other's work and progress, were starting to make the same mistakes. Even when they had completed an element that was correct (in my professional view), when they looked at another participant who appeared to be more advanced in completing the assessment project, they would change what they had previously completed to match what they were seeing. This resulted in all three participants who were observing each other's work making the same simple mistakes, and during the interim assessment by the assessor, the three were provided individual feedback regarding the errors they had made.

The three displayed a level of self-doubt, a lack of confidence in their knowledge and abilities. This mirrors the research regarding suicide in the construction industry which informs us that behind the stoic façade may hide the vulnerability of the construction worker, a demographic characteristic of the low-skilled construction workforce (Inoue et al., 2007; King & Lamontagne, 2021; Milner et al., 2008; Yur'yev et al., 2011).

During the lunch break, I noticed the four candidates sitting outside together talking and seeming to enjoy each other's company. And all four of them walked back into the assessment activity as a group.

At approximately the 75% point of the assessment activity the candidates should have been commencing the roof frame. At this point, there was one candidate who had

completed the roof frame and was ahead of schedule and installing the window frame (Appendix 25). This was the candidate that had constantly remained focused on his own work and was not looking at the others.

There was one candidate who was commencing his roof and was using an unusual process to determine the length and angles of a key roof framing member. The assessor politely interjected and asked the candidate if they required clarification. The candidate replied that he did not require clarification and that this method of doing a roof was how his employer had taught him. The main assessor displayed consideration and open mindedness and accepted the method that this candidate was using in constructing a roof frame. This is an example of an accommodating mindset, where the assessor is open to learning new information and ways of carrying out tasks (Atherton, 2011).

It was noted that one of the candidates had made a critical error in cutting his roof frame and therefore had utilised all the allocated timber to construct the project. As this assessment task is designed with tools and materials appropriate to the task there was no allowance to provide the candidate extra materials. The assessor remained positive and instructed the candidate to continue with what he could do, to finish what he could on the roof and leave the missing element out. The assessor justified this to the candidate by informing him that every point counted, and if a simple mistake is made, it does not necessarily mean that the person fails the entire activity.

As the allocated time to complete the overall assessment activity was coming to an end, the assessor provided the candidates with a countdown at 10-minute intervals. At the completion of this countdown, it was noted that only the candidate who for the entire day had concentrated on his own work had completed the entire construction

activity. The remaining three candidates who were observed constantly looking at each other's work and progress, failed to complete the entire task.

The candidates were asked to take an afternoon break while the assessor and the assistant assessor conducted the final assessment, measurements and photographic evidence required in completing the rubric for each individual candidate.

When the candidates returned to the workshop area the main assessor instructed all four candidates to safely dismantle, de-nail, and stack the materials in an orderly fashion and to pack away all the tools and equipment, and to sweep and ensure that the area was clean.

I observed each of the candidates commencing the dismantling process on their own individual construction project. This activity quickly evolved into a group activity, the group had determined amongst themselves that the four of them could work as a team to quickly dismantle each project sequentially, the team allocated tasks and resources to each member to complete this process (Appendix 26). This resulted in one candidate de-nailing the timber, one candidate stacking the timber and materials, one candidate sweeping up behind him, and one candidate packing all the tools and equipment away.

The chronologically sequential images of this assessment activity (Appendices 24, 25 and 26) were analysed via IPA, an analysis also influenced by Weeks' (2001) identification of the environmental and spatiotemporal influence on demographic behaviour, at a micro, individual level. With the inclusion of my personal narrative, I can identify that this type of group behaviour is representative of how the construction industry works, and I found it interesting that when the formal individual assessment activities were concluded, the four individual candidates reverted to common industry teams' behaviour.

After everything had been cleaned and packed away, the main assessor assembled the four candidates into a group and commenced debriefing the activities of the day. He was extremely polite and at no stage did he single out any individual candidate and praised all of them for the work they had completed and the efforts that they had displayed. The main assessor reiterated the process of the next few weeks, of formalising the evidence and determining a result and informing each individual candidate.

He encouraged all the candidates to remain positive and to continue their efforts of progressing in the construction industry, regardless of the outcome of this assessment activity. The four candidates displayed a positive mood, gave thanks to the assessor and assistant assessor, and departed the activity as a group.

I have previously mentioned in this research that the main assessor was accommodating in the acceptance of new methods and knowledge for carrying out construction activities. I had the opportunity to ask the assistant assessor, whose role was to hold tape measures and assist the main assessor, if he was happy to accept new methods and knowledge when conducting recognition of prior learning assessment activities. His reply was "absolutely not, nobody knows more than the TAFE teacher".

This answer given is a very clear example of an assimilative mindset of an assessor, who believes that only the round peg fits in the round hole, that everything is predetermined and there is no adjustment or accommodation of different ways of doing things. This is consistent with the notion of an anti-dialectal assessor (Atherton, 2011), the sanctity of standardization of processes (Biesta, 2012a) and the assessor's previous self-investment in their developed assessment strategies (Henshaw, 2008). It is interesting to note, that this assistant assessor was a retired TAFE construction teacher,

50 years out of the construction industry compared to the main assessor, who is a current TAFE construction teacher, who remains in industry, and who displayed an accommodating mindset.

Observation 2

Context

This observation was an assessment activity of two small groups. Group One consisted of three candidates, and Group Two consisted of four candidates. The candidates were all male with ages ranging from approximately 27 years old to 35 years old.

Each group of candidates were completing an identical assessment activity in a large open and covered area. Inside this area was a large sandpit in which the activity required them to set out a small unit development, as in common industry practice.

This assessment activity was different to the other two activities that I observed, in that all the candidates were previously supplied with the details, plans, and were required to take an underpinning knowledge assessment in the days prior to the practical assessment activity.

On this day of practical assessment, the assessor had the candidates gathered in a classroom-like location, where the assessor revisited, and reiterated the activity to be completed for assessment and answered any questions that had arisen. The group then undertook an individual knowledge assessment via computer technology. This initial activity took approximately two hours to complete. During this phase of the

assessment activity the candidates divided into two separate groups via a self-nomination process.

At approximately 10:30 AM on the date of the practical assessment, the cohort of candidates were taken to the practical activity environment being a sandpit inside a large, covered area where assessments can occur regardless of weather factors, and where the candidates could use the tools available in a simulated work environment. The candidates were then asked to conduct a safe working method statement, as part of the knowledge assessment.

At approximately 11 AM the candidate groups were setting up the levelling and surveying equipment to be used in the activity. The assessor was asking each individual candidate questions regarding the process of setting up the leveling and surveying equipment.

The assessor could be seen diligently taking notes and marking off an assessment rubric for each group and for each individual candidate. The assessor did not use tablet technology for the practical assessment and had printed an assessment checklist for him to utilise. The assessor also took photographs of the activities throughout the day. It is also interesting to note that the assessor requested that the candidates take photos of the activity at various stages, including completion, so they could add the photographic evidence to their portfolio.

At approximately 11:30 AM, a group were discussing how they would proceed with the assessment activity (Appendix 27), and opinion regarding this was obtained from each individual candidate within the small group. The small groups made a consensus on how the activity would be undertaken and made notes on the plans and specifications document for the activity.

The assessor called for a lunch break, and it was interesting to note that the small teams that were formed remained together over the lunch break, the social process of working in the team continued to the social environment.

At approximately 12:45 PM the group commenced the practical activity of setting out the units. Members of each group shared tasks equally and I observed a rotation of candidates undertaking specific tasks, ensuring that all the candidates could be observed undertaking every aspect of the assessment (Appendix 28).

After approximately two hours the assessor paused the activity and conducted an interim assessment of the work completed so far and provided group feedback in a team environment. This type of interaction was similar to that of an employer or supervisor overseeing the work being conducted on an actual job site and is presented in Appendix (29).

When a group had completed their assessment activity, the assessor met with the designated group and went through the work that had been done, providing advice on any identified errors, or concerns and positive aspects of the work completed.

The two groups of candidates were asked to clean up the simulated workplace and pack all equipment away.

The assessor then met with all the candidates together and de-briefed them on the assessment activity and provided a group result informing them that both groups had successfully completed the assessment activity and that over the next ten days he would go through the notes and photos that the assessor had taken and would allocate an individual score of the assessment that would be emailed to the individual candidate.

Observations and Interpretations

The research observation checklist of descriptive categories was again used to identify the characteristics of the assessor (Appendix 1). This is to ensure a common and valid observational assessment of the RPL practice in all of the observed activities in this study.

When I arrived at the assessment activity to collect observation data as part of this research, the assessor was present and preparing the classroom for the candidate assessment activity briefing and knowledge assessment test. The seven candidates arrived at the specified time and introduced themselves to the assessor who diligently checked the booking and requested proof of identification for each candidate, after which the candidates introduced themselves to each other and had casual conversations in an identical fashion to observation one.

The assessment activity, including rules and timelines, was reinforced to the candidates and documents regarding the activity details, plans, and specifications, that had previously been given to each candidate, were re-visited to ensure all of the candidates understood the activity and what was expected of them.

When I questioned the assessor as to why the candidates were provided with a set of plans, specifications, and instructions prior to the assessment activity, he replied that he was ensuring a best possible chance of success for each candidate by allowing them to prepare themselves, to study and revise and practise for the assessment, much like what occurs in a teaching environment. This practice of preparing the candidate and aligning an RPL activity with teaching practice parallels the discourse regarding a learning and development application in RPL activities (Cameron & Miller, 2004; Harris, 1999; Wheelahan et al., 2003). This differs from observation activities one

and three where candidates are not afforded the plans and specifications until the commencement of the assessment activity.

The assessor also possessed a quality that put the candidates at ease, as was common in all the observations that I observed as part of this study. The assessor in this assessment activity was calm and articulate in providing explanations and created a calm environment for the assessment activity. I did not observe any candidate displaying behaviours that demonstrated stress. Throughout the entire activity the assessor would obligingly clarify requirements of the assessment activity.

The candidates worked closely together and all displayed confidence in participating in discussions regarding the task. The candidates undertook their allocated element of the assessment tasks, and I observed each member rotating through the various tasks required as part of the assessment. The group appeared cognisant of the need for each member to undertake each individual task. The team had developed an attitude of care for each other.

The two groups were observed to be completing the tasks within a similar timeframe and displayed some friendly banter and competitiveness between the two groups. They did not alter their process of completing the tasks as displayed in Observation One, demonstrating the groups' safety and confidence in numbers in carrying out the required tasks—their collective capacity.

This is an example of distributed cognition, where the knowledge is spread across the members of the team to be accessed from the individual when required and to augment individuals' internal memory by using the group as a memory aid (Hammond et al., 2011; Vallée-Tourangeau & Vallée-Tourangeau, 2015).

A driving factor in suicide prevention is the creation and maintenance of good teams, good mates. In this assessment activity I observed that the teams cared for each member. This aids in fostering potential protective factors. Maintaining an individual's confidence in ability via distributed cognition practices and creating a cultural membership of the individuals in the team may present the opportunity to not only talk about issues, but the possibility of behavioural changes being identified, and assistance offered or sought, (Heller et al., 2007; Milner et al., 2017).

The assessment activity concluded, and the Assessor informed me that all the participants had successfully completed the practical assessment. This contrasts with the assessment in Observation One, where only one candidate successfully completed the entire assessment task.

Observation 3

Context

This assessment was organised for four candidates to undertake an individual assessment in a small group environment, as in Observation One, with the assessment activity clustered into the same three domains. The three domains were based on how the candidate successfully works within the construction industry and consist of,

- Construction skills as a domain
- Professionalism as a domain.
- Work health and safety combined with sustainability and planning.

All four candidates had registered and confirmed attendance. A day prior to assessment activity, one candidate informed the assessor that he might not be able to attend due to a funeral.

On the day of the assessment, only one candidate attended. The assessor called the other three and confirmed the funeral attendance of one of the candidates, while another candidate said they were busy, and the final candidate did not answer calls or respond to texts or emails.

The attending candidate was a male of approximately 28 years of age.

The assessment followed the same procedure as the first observation and the assessor utilised a similar checklist as in Observation One. The assessment was conducted in a large workshop with enough space for each candidate to carry out the assessment tasks unhindered by the other candidates. This ensured equality in space allocation combined with tools, materials and equipment allocation for each individual candidate. Specific machinery required for this assessment activity, including large cutting equipment, was available.

The candidate had a brief understanding of the construction project to be undertaken for assessment via an email sent the day before assessment, and as in Observation One, the candidate received the detailed plans and specifications on the actual date of assessment.

After approximately 15 minutes of discussion regarding the plans and specifications of the project to be constructed as the assessment task, the candidate was handed a paper-based knowledge assessment that was assessing the planning knowledge and work health and safety knowledge.

The candidate was required to submit a safe working method statement to ensure that he understood safety and was operating within the workplace safety requirements prior to commencing any practical work on the assessment.

The first element of the assessment was the planning and tools selection for the structure he was to build.

The assessment was designed as a series of processes, similar to elements of competency, that parallel the process of completing this project in the construction industry. As in Observation One, this chronologically segmented series of tasks was to allow for the assessor to conduct an interim assessment and provide the candidate structured and constructive feedback.

The assessor utilised tablet technology containing an assessment rubric, customised to this particular assessment activity, which allowed the assessor to upload the score allocated to the task, the assessor comments related to that assessment task, and photos of the candidate's practical work. This process was common to Observation One.

While the assessor was conducting the interim assessment of the practical component, the candidate was given a paper-based knowledge assessment relevant to the next phase of the construction activity.

The overall assessment activity was allocated a timeframe of 4.5 hours, not inclusive of the 45-minute lunch break.

At the completion of the practical assessment activity, the candidate completed his final knowledge-based assessment while the assessor undertook a final assessment of the practical work completed.

The assessor instructed the candidate to safely dismantle the project and to return all tools and equipment to its original location. The assessor then debriefed the

candidate on the assessment activity. As the candidate failed to complete the entire planned activity the assessor explained the marking process and informed him that this did not mean a fail and that the quality of the work completed is a contributing factor regarding results.

Observations and Interpretations

The assessor was very positive and accommodating, and made the candidate feel at ease and gave confidence.

This assessor gave a demonstration of the assessment process when the candidate was unsure during the initial practical component of the practical assessment. Throughout the remainder of the assessment activity the assessor provided guidance, not telling the candidate what to do, but questioning the candidate if the assessor thought the candidate was going to make a major error (Appendix 30). As in all the observed assessment activities, this demonstrated care for the candidate is important to a positive RPL experience for the candidate (Guðmundsdóttir & Lárusdóttir, 2017; Wheelahan et al., 2003).

The assessor demonstrated accommodating practices and was happy to accept different techniques on how to carry out a specific task related to the practical assessment. I observed the candidate demonstrating high quality workmanship during the assessment activity. This however, led to the candidate running out of time and not completing the whole assessment task.

The assessor de-briefed the candidate and displayed a positive mindset. He explained the assessment and importance of quality over speed and stated that he could score on what had been completed in the activity. He took into consideration the level of quality.

The assessor also explained the errors the candidate had made and provided advice on these.

It was interesting to hear the assessor say that it was common for two to three candidates to be absent on the date of the assessment. Follow-up calls a few days later informed him that these two non-attending candidates had changed their mind and did not want to do the assessment activity. This is a possible parallel to the observation one candidate displayed of self-doubt, lack of confidence in his knowledge and abilities, and again aligns with other research (Inoue et al., 2007; King & Lamontagne, 2021; Milner et al., 2008; Milner et al., 2017; Yur'yev et al., 2011).

The assessor praised the candidate and explained the results process and timeline. Both the assessor and the candidate were positive.

I asked the candidate how he thought he would go if he did the assessment again, and he responded, *"much easier, much more confident, and if I had the plans and specifications earlier, I would have been better prepared"*. This aligns with the candidates in Observation One, where three of the four candidates failed to complete the entire assessment activity, while it contrasted with Observation Activity Two where the candidates were supplied the detailed plans and specifications well prior to the assessment activity. As identified in research by Harris (1999), Cameron and Miller (2004), and Wheelahan et al. (2003), the preparation of the candidate for assessment is a positive trait of successful RPL activity.

Chapter Summary

This chapter presented the findings of the interviews, observations and commenced with a narrative on some hurdles in gathering data for this research.
The key point of interest coming from the data is that the candidates that undertook an RPL assessment in small groups achieved a higher pass rate than the individual assessments.

Cameron and Miller (2004) observed that the policy of RPL in Australia was distant from the practice of RPL in Australia. The limited amount of research regarding RPL in Australia had identified issues with implementations, commonly being the language utilised in the process, the complexity of the process, and the loss of power of the RPL candidate.

The research also provides examples of best practice and offers suggestions to improve practice (Bowman et al., 2004; Cameron & Miller, 2004).
These suggestions of best practice have been implemented in Government policy regarding RPL in Australia with the release of an Assessor Guide (NSW Department of Education and Communities, 2015), and include preparing the candidate, fair assessment practices, and a small reference to the implementation of group assessment activities.

The findings of this mini-ethnographic case study uncover continued deficiencies in RPL practice in the cohort of the construction industry, along a continued theme of lack of preparation opportunities for the candidate, confusion, frustration. It also identifies the feelings of the candidate, being fear, stress and humiliation. In comparison, the findings identified best practice with this cohort, and explored future

possibilities of implementing group practices, and with an adequate process, the likelihood of alleviating some of the identified barriers to RPL.

Data excerpts comprising direct quotes from interview participants combined with SER and IPA data together with observation notes and photographic images of the observations, present authenticity within this study.

The next chapter reviews the key elements of the mini-ethnographic case study and further analyses the data gathered from a meso and macro perspective with the inclusion of literature and explanation.

Chapter 5: Analysis and Discussion

Introduction

A great deal of literature is available on the recognition of prior learning. This, however, is not the case when one searches for data regarding the application, the outcomes, and the research of group based RPL. There is limited data, with some examples of Trojan horse RPL (Harris, 1999), a study regarding an RPL activity of farmworkers in South Africa (Deller, 2020), a minor reference to group RPL practice in a government assessor guide (NSW Department of Education and Communities, 2015) and in Roselyn Cameron's (2013) paper on recognition of prior learning in Australian HRM contexts.

As we learn best in the social environment (Miller, 2011; Vygotsky, in Kozulin et al., 2011), the concept of a group based RPL activity is not a random, erratic concept. The themes of assessor competence, acceptance of knowledge, the relationship between assessor and the candidate, and the concept of group RPL come from the analysis of the data, combined with the relevant literature.

The following chapter presents the interpretation of the results and provides support for the conclusions, adding to the literature regarding Group RPL in the construction industry.

Extensive experience in the vocational education sector combined with comprehensive experience in the construction industry has provided me with a contextual set of lenses to interpret the data collected.

Interpretation of Findings

In the previous chapter, I presented the linguistic and non-linguistic data resulting from the interviews, the observations, and made a reference to a survey. The observational data was born from my field notes, photographs of the observation activities, and the observation checklist (Appendix 1). The interview data was the individual participants' interpretation of discussions and responding narratives based on their thoughts, influenced by their histories.

The findings in the previous chapter identify, in the context of the gathered data, the individual opinions, and the processes and interactions in small group assessment activities, where the building activities provided a micro lens.

The RPL assessment activity conducted as a group activity proved to have the highest success rate compared to the other observed individual activities.
This discussion investigates the findings with a meso lens, a lens that aligns with the cultural group—the low/non-qualified construction worker—and a macro lens aimed at implementation and policy in a larger context.

In this chapter I acknowledge myself as an instrument of data collection and interpretation, bringing my own histories and identity, in applying my interpretations in the analysis of the findings (Mertens, 2005; Creswell, 2014).

This section imparts a representation of the patterns, in response to the research questions, that emerged from the linguistic and non-linguistic data collected. These thematic patterns dynamically link to the research questions related to best practice and group based RPL, being: 1) the assessor is responsible for implementing respect

for diversity, care for, and understanding of the candidate; 2) recognising the individual candidate holds a range of cultural and emotional nuances; 3) an RPL practice embracing broad evidence, aligned with alternative credentials and industry recognised certification; and 4) group assessment practices cognisant of the construction industry's teams culture, "their collective capacity".

These thematic patterns cluster under a series of key headings being,

1. Assessor competence
2. Candidate identity
3. RPL practice evolved and the emergence of Group RPL

Assessor Competence

In an RPL activity, the candidate is subjected to the conditions prescribed by the assessor. These vary from positive and supportive to negative conditions. Positive conditions include understanding the background of the candidate, creating flexibility in the process, and creating an accepting environment predicating a successful outcome. In contrast, negative conditions lead to an oppositional, negative environment, which some participants may refer to as hostile, inconsiderate of access and equity, inconsiderate of the individual histories of the candidate, inconsiderate of the acquisitional method of knowledge attainment the candidate has experienced, and inconsiderate of care.

"turning up with 10 people standing over the top of me and then … like I was in court, and then put on trial, and then providing evidence and being told by somebody who didn't have experience in that area. Just because you've got the evidence doesn't mean you're getting, getting the RPL, to me that was like … hostile"

This may not be a deliberate act of the assessor, but a reflection of the environment or system they are a member of, and the induction to that system that they themselves were subjected to. As described in Chapter Two, the literature review, a teacher under supervision is mandated to operate in a prescribed manner. This performance is validated by the supervisor observing their practice utilising a predetermined rubric, or checklist, ensuring the system reproduces itself via behavioural descriptors and stimuli, an autopoietic society (Heidegger, 1962; Mariotti, 2002), or as Habermas (1997), describes it, a lifeworld.

In a supportive system of RPL, the assessor combines a process of adherence to the competency outcomes, the rules for gaining a qualification, and the professional judgements made regarding approaches to RPL, with a consideration of the characteristics of the participant cohort, and broad notions of evidence validity. This is what Pokorny et al. (2017, p.16) term "professional artistry".

"So, we're taking them through, holding their hands and take him through this process"

"He was flexible, because I knew he knew my background, but he also knew his course very, very well and he knew what this person had to be to actually get the qualification"

"Certainly, everyone that is struggling, yeah. Build up their confidence and let them believe that they can do it"

"You got to [have] the empathy, you've got to understand the job, understanding the requirements that you need to hold to be able to do the job. But then you've also got understand the training package"

"You need to make the candidate fairly comfortable before they start, and I think you need to be fair to the candidate. And I think that someone who's giving me RPL needs to be, uh, have experienced in that area".

"it's a matter of us taking away the barriers that they have, and the fear that they've got"

"I would be looking at, uh, finding their background, their particular skill and interest. And then if it's a practical side that we're assessing, then it's choosing a

product or an activity that they would feel comfortable with and they would show that, uh, ability to do it."

" You've got to actually understand them and know them. I don't think you can bring them in and just say, here's a test. Cause I said, I don't think they'll turn up

"Yeah, I think it should be more flexible, but I think it's the person who is assessing. I think they have to be thinking quite broadly what has this person done? Even though my paperwork says this, I need to be able to talk to this person on a one on one and not just look at what's in the documentation"
"So, you have to be accommodating, I think. Yeah. Accommodating, uh, flexible, uh, humorous, that's, uh, getting again that word comfort"

The non-supportive environment presents as inconsiderate of the candidates' construct, while maintaining strict adherence to the system, the competency elements and performance criteria, under a broad umbrella of a massified policy, and the culture of their training organisation. This localised system may be influenced by the lack of government funding allocated for RPL practice (Appendix 31), resulting in an absence of engagement in a process that offers little reward for the provider. This assessor presentation may render the candidate's knowledge decontextualised, and render themselves and their knowledge and skills invisible to the competency outcomes; this is a depersonalised approach to RPL (Allais et al., 2014).

"I couldn't see how he could do an RPL for anybody. Yeah. He's so regimental and rigid and it's my way or no way. He would be the worst person in the world to conduct an RPL with someone."

"I felt I was unfairly treated in an RPL process"

"I felt humiliated and um, felt it was a very unfair process"

"Because it humiliated me and I thought, I've been in this profession for all of this time and told that no, you're gonna have to start your qualification again. And I was like, this can't be right. It's not right. So, the person was totally unreasonable because they had an academic tick the box quality"

"Oh, you're not quite as good as what I thought you were"

The comments presented above are mirrors of the comments captured in research by Smith and Clayton (2011), regarding the relevance and quality of vocational

assessments from a student perspective. The comments below are an excerpt sourced directly from their research (Smith & Clayton, 2011,).

"The language and body language of the teachers when you talk to them about RPL is a real put down. They don't seem to think it is something you should be doing". (p.7).

"The assessor said to me: 'The reason we're doing this is to see if you are as good as those who have done the proper course. The problem is that you haven't really learnt properly, which will put you at a disadvantage'." (p.7).

These behaviours are not explicitly expected in an education environment, however, may become present due to a variety of influencing factors, being, the re-representation of the dominant system, the lifeworld, or autopoietic culture (Heidegger, 1962), (Mariotti, 2002), (Habermas, 1997), resulting in an ego created boundary between the assessor and the world (Mariotti, 2002).

It is identified that the observation checklist utilised in this research (appendix 1), being informed by the literature, the interview discourse, and my own history and construct, remains current regarding the ideal performance of an RPL assessor. This checklist identified the displayed behaviours of the observed assessors. These are clustered under the subheadings of,

- Instructional Strategies
- Presentation
- Assessor materials
- Responsiveness to candidates
- Creating inclusivity
- Clarity

This checklist parallels to some of the indicators of effective facilitation in Ker's (2017) development of SPRINGBOARD, a tool to assist facilitators to reflect on their role throughout the RPL process. The SPRINGBOARD points to understanding the learner, utilising appropriate resources, providing support, ensuring accessibility, and linking to the real world.

As an ethnographic study, this research searches for meaning and description of the identified culture, or subculture, and as shown above, the education environment can influence assessor behaviour. As the assessor of construction qualifications would be required to have construction industry qualifications and experience, this history would permeate an influence on the construct and identity of the assessor. The hybrid analysis identified an example of this influence.

Assessor Identity

Through the interactive visual concordance analysis, it was identified that some of the interview participants replaced the descriptive lexemes for participant, student, or learner with the passive lexical of "them", and "they", with the word assessor, being substituted with the words "us" or "we".

The use of "us" and "we" are deflecting individual critical attention on the assessor to the collective realm of all assessors. The interview participants were all from the education industry, and all but one was from the construction industry. Of that, one participant was of a professional occupation, being an engineer, and the remaining three were all from a carpentry trade background, a certificate III industry qualification background. As my own background is a certificate III construction

industry qualification, and a similar age to the certificate III qualified interview participants, I can confirm the social norm of the terms “us” and “we” within the trade element of the construction industry at that chronological timeframe of the 1970’s and 80’s. During that time of high unionisation, the use of these terms promoted mateship, and protection, by deflecting individual blame, or sharing individual success as a group identity. The trade qualified interview participants utilised “us” and “we” in 899 occurrences, while the professionally qualified interview participants utilised this a total of 112 times.

The trade qualified participants also had greater use of the terms “they” and “them, being 970 instances and rarely using the term student or learner with only one of this group utilising the term candidate. In comparison the professional participants presented a common vernacular of “candidate”, “learner”, and “student” and utilised 281 mentions of “they and them”.

This information being pertinent in understanding the low qualified, mature construction workforce, the meaning of solidarity within this cohort, and informing the relevance of a group RPL strategy with this cohort.

It is interesting to note, the interview participants in this research who had the greatest use of “them, they, us, and we”, and the minimal, or non-existential use of the term, “candidate, student, or learner”, displayed the lowest amount of emotive speak. During the hybrid analysis, it was identified that the spectrograms of each of these candidates remained relatively constant, as opposed to the other interview participants whose spectrograms demonstrated clear elements of differentiation in the patterns that are associated with emotive speak.

The use of “us” and “we” may be a sub conscious means of deflecting individual critical attention on the assessor to the collective realm of all assessors.
As does the use of “them” and “they”, removes concern for the candidate, and removing individual considerations from the RPL process.

The assessor identity is an area of this research that has remained confined to the academic environment, and as presented above, via the hybrid analysis, there presents a background construct of the assessor that may impact on the cohort in this research. This warrants further investigation and can be a focus of future research.

Candidate Identity

In the previous section of this chapter, the assessor competence, including the consideration of the individual candidate, was presented. In this section the data was investigated to discover the cultural identity of the low/non-qualified construction worker.

This data analysis identified influential features that informed the construction of a series of elements relevant to the research cohort, within the framework of the research questions.
These elements being the cohort’s or its members’:

- Perceived self,
- Self-confidence and emotion,
- Industry environment.

Perceived self

Sonia Feder-Lewis (2021) poses the point that we assume an identity associated with adulthood. This presents in our being via the constant questions from our people of influence, parents, teachers, uncles, aunts and more, *"What do you want to be when you grow up?" (p.1).* This presents as a type of conditioning, an expectation that the journey to adulthood and career choice is defined and unchangeable. The impact of this conditioning can have an effect on our perceptions of ourselves, on how we fit into an education environment.

"My father was the only one in his family who finished school. My mum went up to grade six"

"When I read it, I've gone, oh my God, I'm so far out of my depth, this is ridiculous. We are putting ourselves into a pigeonhole before we even start"

"we've got a guy who's an older guy and he's very intimidated about studying or going to school"

The impact of a perceived self was evident in the third observed assessment activity, with all candidates applying to undertake the RPL process, but self-reflection of their self-abilities leading to lack of confidence in themselves to undertake the assessment, resulting, in turn, in non-attendance and non-participation in the assessment activity for three of the four candidates.

Low school completion and negative thoughts regarding education can impact the desire to re-engage with the education process (Leth, 2014). The lack of identity and feeling of belonging in the education environment, leaves the candidate hesitant to re-engage with education and aligns with the analogy of a stranger in a strange land (Feder-Lewis, 2021). This however did not occur in the first and second observations of assessment activities. This may possibly be due to stronger home support, career goals, and a stronger perception of a capable self.

Self-confidence and emotion

Emerging from the interview data were the identified emotions attached to the words, phrases, and sentences within the participants' discourse, particularly within the discussion with Ross.

The first question sought the participant's experiences of RPL, from an assessor's viewpoint, and as a candidate. The leading response from this initial question to Ross presented a negative experience for him as a candidate in RPL. Through the use of the hybrid analysis of the Interactive Visual Concordance, the Sound Event Recognition, and the Image Processing Analysis of the spectrogram, the authenticity of emotion associated with the response could be validated (Figures 13, 14, & 15).

In commencing the response with a negative and emotional rhetoric, Ross exposed his deeply emotional experience. With a researched view that the construction industry is macho, stoic, and displays restricted emotionality (Milner, et al., 2017), (Bernard, 2021; Heller et al., 2007; King et al, 2018; Milner et al., 2008; Roche et al., 2021), this research presents the emotive elements that underpinned both the positive and negative narrations from the research participants.

Saying an emotive word does not automatically equal an emotive response. As emotions cannot be produced when they are absent, to feel out of nothing is described as impossible (Zaborowski, 2018). The authenticity of this emotion is confirmed by the hybrid analysis, with the spectrogram analysis identifying the feelings associated with the words' pronunciation. Moreover, the design considerations incorporating care for the candidate were evident, through

observation, in an optimal RPL program. Such considerations acknowledge the emotive being of the construction worker.

Regarding the identification of candidate confidence, the data came from the observation activities and the participant interview activities in this research. Observation Activity One in this study presented four candidates undertaking individual assessments. These assessments were identical for each candidate with commonalities of space, equipment, and materials. The research identified one candidate who focused on his own project and did not observe the other activities. His work was of a high standard, and he was the only candidate to complete. The other three individual candidates constantly looked at each other's work and cross-checked what they saw against their own, as a type of validation of progress and methods utilised. This resulted in all three candidates copying the same errors and culminated in a non-completion outcome for all three candidates.

The group of four RPL candidates were of a similar age, worked in a similar industry environment, and all presented as male. The paper-based knowledge assessments received similar scores, as did the technical skills each candidate presented, displaying a similarity of underpinning knowledge and technical skills amongst candidates. The possible differentiator was the confidence candidates displayed in themselves.

In Observation Three, the assessment activity was planned for four candidates to attend. On the day of assessment only a single candidate was present. Contact with the missing candidates confirmed they were busy, with one not replying to text or voice calls. Eventually the admissions emerged that they did not want to undertake the assessment due to fear of failure. Again, it seemed highly likely that the

differentiator between the candidate who attended and the candidates who declined to attend was the former's confidence in himself.

"a lot of men don't want to put themselves in a position where they, um, that maybe they lose control, and they have the risk of failure"

" I think from participant's side, I think it very much comes back to a confidence thing".

"Some blokes don't sell themselves"

The construction industry displays a confident exterior, however the fragilities of the low/non-qualified construction worker cohort emerged when faced with an individual assessment of abilities.

Observation Activity Two was a group-based assessment undertaken with two small groups of candidates. Each group had the similarity constitution of three to four candidates of the same gender, being all male, and all were within an approximate age range of mid 20s to 30. There were no discernible observed instances of the impact of confidence in the demonstration of their individual abilities or the group mechanics. Varying factors could influence this finding including:

- The candidates were presented with the details of the assessment activity in the weeks and days prior. This practice is identified in the research participant interview transcripts, and a range of literature as being a positive trait of successful RPL activity (Cameron & Miller, 2004; Harris, 1999; Wheelahan et al., 2003).
- The similarities of the assessment were based on it being undertaken in the same teams-based manner as the activity is completed in the industry environment, including the use of the common tools as utilised in industry.

This simulated work environment, and the inclusion of the common industry tools may act as cognitive artifacts (Zhang, 1997; Zhang & Norman, 1994).

- The impact of distributed cognition, in the access of knowledge via group membership (Hammond et al., 2011; Michaelian, & Sutton, 2013; Vallée-Tourangeau & Vallée-Tourangeau 2015).

The presence of these factors possibly reduced the stresses associated with an individual assessment activity and aided the comfort, confidence, and performance of the candidate.

Industry Environment

People are influenced by the environment they are situated in, and in parallel, the environment is influenced by people. Our adaption to the environment, both physical and social, acts as a creation of the environment, a maintenance of the environment. The influences imposed on the environment are not only imparted by the individuals within, but these can also originate from conditionally imposed factors such as organisational requirements and attitudes from people not actually situated within the confines of the local environment (Saarloos et al., 2009). An example of this is a corporate entity that does not employ safe work practices, creating an environment of risk for the people within that environment.

"You've got to sort of get in and get a bit of a picture of where they've come from, which I think gives you a bit more of an idea how to go about what you're going to do with your interview with them"

"It comes back to considering the language, the culture, um, the work environment of individuals",

The construction industry environment exhibits an environment of mateship, skills, and strength. While this may be present in a small number of work environments, the industry in general presents a range of themes that describe the complexities of life as a construction worker. Heller et al. (2007) investigated the construction industry environment under the themes of:

- Working conditions
- Pressure
- Interpersonal relations

Under the theme of "working conditions" the research determined that there were huge workloads and long working hours of between 60 to 80 hours per week. This figure is reinforced by the research of DiNuzzo (2021), who found there was a 75-hour working week. The working conditions range from internal works relevant to fitting out the internal space of the built structure, to the external space, the ground and foundational works to support the structural components of the building and the manufacturing and erection of the structural components followed by the cladding and roofing systems. This work is carried out without the assistance of a climate-controlled environment, resulting in exposure to the weather extremes as part of everyday working life in a labour-intensive role.

Bullying is also a factor in the working environment of the construction industry with support for this finding coming from Misko et al. (2020), who researched a range of people undertaking the Certificate III (apprenticeship) while working in a range of industries. Her data revealed 24.1% of males had seen or were subjected to bullying in the workplace, with 49.6% of females either witnessing or experiencing

bullying in the workplace. The study conducted by Misko et al. (2020), surveyed 4395 people, with 23.2% of these participants from the construction industry.

All jobs have certain pressures related to them. In the construction industry, the pressures relate to, in some cases, unreasonable timeframes and contract conditions that contain penalty clauses for each day past the contracted end date. This is generally regardless of weather conditions and other unforeseen factors that may impact on the completion timeframe. With every trade on the job working under the same circumstances, the instance of conflict will arise when competing for the same space to ensure the contracted task can be completed within the timeframe.

The construction worker also experiences the pressure of an uncertain future. Most low or non-skilled people working in the industry are on contracted work relative to the specific task on a specific job or will be employed on a casual basis when required. This leads to constant pressure regarding when and where the next job will be. Heller et al. (2007), identify this as a factor in suicide in the construction industry and present quotes from their research participants as follows

> "You don't know where your next job is going to be and if you are going to be out of work for the next three months" (p.112).
>
> They just go there is your 8 hours' notice, see you later, and you think, 'geez, I thought I was a valued employee, but now I am not." (p.112).

Further research from Japan also confirms people experience greater stresses during times of economic insecurity (Inoue et al., 2007), as does the Swedish research from Yur'yev et al. (2011).

The multitude of pressures and the working environment in the building industry present a causal effect in problematic relationships of the construction worker and others in their life.

Heller et al. (2007) present relationship issues as related to reduced time with family, in particular children. They note the prevalence of separation and divorce within this cohort. This can be the result of not only a male dominated culture, where Heller et al. (2007) identified industry workers believing that the male environment does not help them learn how to deal with women, but also the long working hours, the effects of bullying, the pressures of project completion, the lack of job security and the prevalence of drug and alcohol usage in the industry (Milner et al., 2017), (Bernard, 2021Heller et al., 2007; Inoue et al., 2007; King et al., 2018; Milner et al., 2008; Roche et al., 2021; Yur'yev et al., 2011).

> *"He, um, he would put this defence mechanism was to start abusing everybody when he couldn't cope, and he'd stand at and he'd scream his lungs out and he'd be abusing everybody. And in the end, he was on the floor in tears because he knew I wouldn't put up with the language and swearing and we, he, he was reduced to, he'd actually hit rock bottom ".*

> *"We had a friend who knocked himself off, he was a builder. Yeah. And that is back when we had the recession. And none of us picked up on it, he, um, he come around and saw everyone one by one. Yeah. And different places. He seen everyone. He was basically, he was obviously saying goodbye it just floored us absolutely".*

The prevalence of relationship breakdowns in the construction industry can manifest via the lack of time the construction worker can spend with friends and family. Over time, the distancing effect between the construction worker and their friends and family, their support system, breaks down. This, combined with drug and alcohol use, and the environmental work stresses and pressures, lead to a greater risk of self-harm and suicide of the low/non-qualified worker in the construction industry (Lowe, 2021).

The narrative of my background, with experience in the construction industry and in education, brings similarities to the findings above. Having a work colleague commit suicide several years ago and retrospectively identifying the warning signs that were displayed prior, sits in contrast to the engendered belief that the industry should be macho and stoic. Instead, it is the lack of discussion that occurs leading to the display of restricted emotionality that exists within the industry. Seeking help in this industry requires the barriers of false machoism and stoicism to be removed (Milner et al., 2008), however the cultural descriptors and perceived norms of this cohort influence the maintenance of the machoistic and stoic behaviours in this environment (Saarloos et al., 2009).

‘‘When it comes to personal issues, guys clamp up, they don’t want to talk about anything’’ (Heller et al., 2007, P112).

The realities are that the construction worker carries the same fragility of humanity as anyone else in society.

Understanding the work environment of the candidate is a consideration to influence environmental design and to promote the desired behavioural outcomes (Saarloos et al., 2009).

RPL Practice Evolved

The purpose of this research, in response to the research questions, was to critique the current literature on the recognition of Prior Learning (RPL), and to investigate the current practice, with opinions of group RPL from both candidates and assessors and observations of assessment activities. The analysis of this data informs the

construction of an ideal group method of RPL for the cohort of the low/non-qualified construction worker.

To ensure best pedagogical practice as the primary focus, this model is built around the primary civic duty of education to remove the commodification and commercialisation of education. A second step is to reshape the model to include sustainability from both a compliance and financial perspective. This ensures an education premise, in lieu of a commercial, return on investment focus that may view the candidate as a customer, and lose sight of their individual nuances.

This research identified issues with RPL practice in the construction industry. These issues were centred around procedural factors such as communications and the language utilised, preparation for assessment, support for the candidate, and the impact of funding and compliance as to whether RPL is offered. Jacobs (2018) refers to this element as institutional culture in relation to the values surrounding RPL. Further to this, the research identified other elements relative to the researched cohort, which include the physical and cultural workplace environment, stress, fear, confidence or lack of confidence, and the fear of failure or humiliation that may still remain to create a less than problem-free implementation of a new model of assessment.

Consideration of these findings combined with the suggestions arising from the interviewed research participants, the data from the observed assessment activities, and the identified literature, provide the opportunity to design optimal group RPL practices for this cohort.

As identified earlier in this chapter, the observation checklist (Appendix 1), utilised in this research remains as a good indicator of assessor practice and will underpin the assessment strategies to be presented.

The key points arising from the research indicate that a single, one-size-fits-all RPL process may fail to engage the identified cohort. The factors of engagement, consideration of each candidate's construct, and the competency outcomes and compliance requirements, indicate the need for a staged model, or a tiered model, depending on the outcome required. There are some examples of such credentialling.

Key to some of these concepts is the implementation of alternative credentials. These are commonly described as micro credentials, digital badges, or industry certification. In an Organisation for Economic Co-operation and Development (OECD) report conducted by Kato et al. (2020), the use of alternate credentials can be implemented to fill gaps in the industry needs and attract new learners. Industry certification is not new, with over one million people certified as a Project Management Professional (PMP) (Kato, et al., 2020).

The United States of America uses the descriptor that these micro credentials are greater than a single unit however less than a degree and are utilised in the apprenticeship programs albeit without recognition from their national education authorities. New Zealand assigns between 5 to 40 credit points to the micro credential, with 40 points being equivalent to the credit points of a Certificate III qualification (Kato et al., 2020; New Zealand Qualifications Authority, [NZQA] 2022).

The impending trade licensing scheme, to be implemented in Victoria, becomes an impetus for many existing construction workers to have their skills formally

recognised (The State of Victoria Department of Environment, Land, Water and Planning [DELWP], 2020).

This licensing structure aligns with three categories of work practice (DELWP, 2020), these being:

1. A licensed trade employee. This allows the individual to only work for an employer.
2. A Registered Building Practitioner, Limited (Contractor), with authority to undertake work < $10,000. This allows the individual to undertake subcontract work for a registered builder, or a private client up to the value of $10,000. There is no requirement for consumer protection insurance.
3. A Registered Building Practitioner, Unlimited (Builder), with Insurance and authority to undertake work > $10,000. This allows the individual to undertake works for a registered builder, or a private client with no limit on the value. There is however the need for consumer protection insurance.

As this research is addressing the need for the low/non-qualified construction worker to undertake RPL and continuing education, the model I present here follows a similar tiered structure to that of the impending licensing categories. This allows flexibility in the RPL practice and career progression (Pokorny et al., 2017) from initial licensing through to the Registered Building Practitioner classifications, in this research-informed, researcher designed Group RPL model.

This researcher designed model proposes a three-phase concept that has been developed out of the research findings and is described below.

Phase One, Licensed Construction Trade

This model aims to validate the candidates' skills and knowledge at the most basic requirement. As the classification of this licence is at the lowest level of the tiered concept, it refers to people employed as construction trade workers. This does not include sub-contractual roles, therefore, there was a confidence that this cohort works under the supervision of an employer. Due to this factor, it is proposed to utilise an alternative credential, an industry certification of the candidates' skills and knowledge in a workplace environment where the candidate has little autonomy.

The use of an equivalent, alternative credential may remove some of the pressures related with an RPL activity against the Certificate III competency standards and performance criteria. The existing compliance regulation process is documented in the literature as laborious, prohibitive, and complex (Bennett, Southgate, & Shah, 2016; McLaughlin & Mills, 2012; Souto-Otero, 2016), thereby promoting what Pokorny et al. (2017 p. 5) terms a "monological approach" where the assessor's process was parallel to the academic compliance, leaving the candidates disempowered.

"Yeah. I think to me, it appears to me that the assessor has got all the control and because they've got a set of criteria"

"the RPL criteria can be too tight where it says the person looking for RPL needs to do this and this and this and this and this and this and this and this. And they might do it in a classroom setting, and some of those things in the documentation is old hat and not done anymore or it's done slightly different"

Providing this alternative allows the assessor greater flexibility in assessment activity design and the assessment judgements used, resulting in the promotion of a dialogic and mediatory process where the candidate and the assessor have equality of power in identifying equivalence of knowledge and the competency outcomes or

certification requirements (Pokorny et al., 2017). My participants agreed that dialogue and social, collegiate interaction in practical tasks in a realistic environment support learning and assessment.

"If I give them a 159-page document, they're going to run"

"So, I see it as a partnership between the candidate, the learner, and the assessor who's there to take them through the journey together."

"it wasn't tick, tick, tick, tick, tick, tick, tick. It was evidence, what have you done. So I was able to use life skills as well as industry skills, cause sometimes your life skills actually cover your RPL."

The Australian Qualifications Framework (2013) presents the application of knowledge and skills at a Certificate III trade qualification level as applicable in known and stable contexts. As the candidate is deemed to have limited authority regarding their work role, this conceptual model is weighted on the practical component of the qualification.

"We always had the idea of perhaps a practical element, but we never really did it"

"You can pass all the theory in the world, but if you can't do it, and the weighting of assessment, that has to be on the practical activity and the practical qualification, you can pass every knowledge test, you know, but if you can't do it, you can't be a carpenter"

Applying a focus on the practical element of the qualification aligns with the everyday work environment of the candidate providing contextuality and familiarity for the candidate. This focus also includes the tools utilised in industry, not only are these tools used to complete the prescribed tasks, but these tools can also act as artifacts in aiding memory and cognition (Zhang,1997; Zhang & Norman, 1994). Utilising multiple-choice questioning as a knowledge assessment strategy also embeds it as a cognitive artifact for the candidate, as an external representation of distributed cognition (Zhang,1997; Zhang & Norman, 1994).

The familiarity of these industry authentic practical activities and assessments may reduce some of the candidate stressors such as fear and anxiety that have been indicated in this research.

The practical examination can be designed to be chronologically short. In an alternative credentialed environment, a wholistic approach could be utilised, with one simulated industry project covering the entire micro or alternative credential.

In Observation Activities One and Three in this research, the candidates were not afforded the details of the assessment activity until the day of assessment. After the assessment activity was completed, only one candidate had fully completed the tasks. I asked the remaining candidates, if you had the details prior and could prepare, do you think you would have performed better? All candidate responses were *"yes".*

"The preparation is important because they've got the knowledge, they got the practical, but they don't have that prep skill to put it together"

This informs the critical importance of preparation of the candidate prior to the assessment activity. This preparation process is designed in consideration of the findings in this research with plain language utilised, and acknowledgement of the importance of understanding the candidate's identity, and creating an environment of care, and inclusivity. This process has been utilised with success in Glenys Ker's (2017) Capable NZ research regarding consideration of indigenous and ethnic cultures and their implementation of "acknowledging Māori" (Ker, p. 34), and may align with the construction industry subculture of the low/non-qualified worker.

"That's the big difference, we speak to two different languages, even though it's the same topic. We've got an education language and we've got a tool's language."

"And it was just the way it was written, it, it didn't make sense to me until he explained it. And then I, when I walked out and I thought to myself why didn't they write it in, in a way that it wasn't as intimidating."

"I don't want them talking to me back in training jargon. I want to hear what they're doing out on the site, and do they understand what's in the real world, what's going on, because that's where they're doing it".

The discussions undertaken with the interview participants in this research, together with the analysis of the non-attendance of three participants in assessment activity in Observation Three, led to the concept of an initial assessment-free environment, inviting the candidate access to a non-threatening environment.

"An assessment-free environment where they don't have to worry, and then give them confidence from that to then go ahead from there to the RPL process"

"The first part as a totally non-assessed, um, friendly environment that there's no stress that might work"

"That to me sounds an inviting non-stressful community".

This environment was termed by one of the interview participants a 'Learning Hub', allowing the candidate to learn what is expected of them, to practise the skills required for practical assessment and be fully prepared for the formalities of the assessment activity.

This hub could be group based, where discussions take place, and self-validation of knowledge takes place. This attempts to bring in the learning environment into the RPL environment, embedding the same principles of learning, and learning in a social environment—the social distribution of cognition (Michaelian & Sutton, 2013)—into the RPL practice. In the words of participants in another study:
"I've sort of always been a proponent of RPL as a learning environment rather than as strictly an assessing environment." (Smith & Clayton, p. 10).

"Self-reflection, including reflection in group settings, is suggested by some learners to be a powerful process for identifying and validating learning outcomes". (Smith & Clayton, p. 10).

The assessment activity could be individual, or group based as determined by the candidate. This is to allow this cohort a stress reduction in undertaking a formal assessment activity. This assessment is a single project covering the entire alternative credential. This provides efficiency and therefore reduces the cost to the candidate.

The candidate who does not achieve the outcomes of this phase one concept, would be required to undertake training and practice possibly over a long chronological timeframe in preparation for re-attempting the formal assessment activity.

"it's not full pressure, it could be a four-year activity and they can do it bit by bit"

This would require changes to the current funding arrangements as the personal cost to the candidate may become prohibitive.

Phase Two, Registered Practitioner (Limited).

Phase Two builds on the candidate outcomes and experiences in Phase One and introduces the formal certificate III trade qualification. This introduction of the nationally recognised trade qualification is to meet the requirements of the Victorian Building Authority (VBA) registration as a Registered Building Practitioner, Limited (Contractor). This allows the successful candidate to be self-employed and undertake subcontract work for a Registered Builder or private client up to the value of ten thousand dollars.

The application of Phase One as commonality of process, an entry into the RPL for the low/non-qualified construction workers system, not only creates an engagement opportunity in encouraging this cohort to re-enter education but becomes a vehicle for the assessor to gain an understanding about the candidate, both technically and personally, allowing the creation of a partnership between the candidate and the assessor in designing the individual pathway to the outcomes of Phase Two.

"We view it as a partnership. So they both got just as much power as each other. We don't see it as a hierarchal system"

The stage one assessment forms a credit into the stage two formal Certificate III qualification. Depending on the area of industry the candidate works— domestic construction or commercial construction, concreting, or joinery—the remaining program can be tailored to suit, by aligning the elective competencies to the identified stream, or area of the candidate's work. This would allow greater RPL of the work activities in lieu of training and assessment, or gap training, for these competencies.

In this phase assessed group practical activities remain combined with individual assessment activities. These activities would align with the findings in this research that assessments should mirror the workplace activity. The findings presented that hanging a door in industry is an individual task, so the RPL practical assessment could be individual. Parallel to this, the task of setting out a structure to be built requires a team of people, at a minimum two people. The practical assessment of this task would occur in the same manner, via group assessment. The continued inclusion

of group discussions and maintenance of the social environment provides support for the candidate.

The knowledge assessments will continue to be multiple choice with the gradual introduction of essays and assignments, particularly as this phase will include three competencies from the Certificate IV Building and Construction, a further requirement of the VBA. This is due to the greater managerial and financial responsibility set at this level of practitioner registration.

As candidates may be currently self-employed and working as existing subcontractors, the Certificate IV elements may be RPL'd with identified gaps.

Phase Three, Registered Practitioner (Unlimited).

Successful candidates from Phase Two who are not currently registered with the VBA as a builder, can continue their development via the inclusion of Diploma of Building units into the Phase Three as a further requirement of the VBA. This is particularly relevant if the candidate is managing works with a value over ten thousand dollars, although financial probity is also a requirement of this classification. The continuation of best RPL practices, as identified in this research, including group practices, supports the candidates in achieving the learning requirements of this phase.

There is no requirement for a candidate who is currently registered as a Builder with the VBA, to undertake this phase, however if they are not a qualified

tradesperson and personally carry out trade works, they would need to undertake stage one and/or two to legally work as a trade, even if only part time.

Chapter Summary

This chapter has presented the interpretation of results regarding the culture of the low or non-qualified construction worker, in the context of responding to the research questions and designing an RPL program inclusive of group RPL assessment practices. These are presented under the thematic patterns of:

1. Assessor Competence, regarding implementing diversity, care, and understanding for the candidate.

2. Candidate identity, recognising the individual candidate holds a range of cultural and emotional nuances.

3. RPL practice evolved and the emergence of Group RPL, a practice embracing broad evidence, via alternative credentials, and the inclusion of assessment practices aligned with the construction industry's team's culture.

The researcher designed conceptual RPL model that evolved from the research aligns in similar stages or phases to the proposed regulatory environment of construction trade licensing.

This conceptual program provides an example of a research-based Group RPL program that may address some of the current issues pertinent to the low/non-qualified construction worker via a deep understanding of the cohort, along with the inclusion of learning and the associated pedagogies, into Group RPL assessment practices. Embedding inclusivity and flexibility into the assessment practice allows the education environment to respond to the diversity of the cohort, to accept the varying voices of the RPL candidate, and in a dignified way, honour all our differences (Nikolou-Walker, 2017).

In the current CBT assessment process, the pre-determined performance criteria have limited flexibility. Therefore, to enable the desired flexibility in the proposed conceptual RPL process, the implementation of this model will require a cultural shift in RPL process and the acceptance of varied evidence. This will require the theories of change management to be applied.

The typology of change offers two distinctions, morphostatic, or first order change, and morphogenetic, or second order change (Pádár, Pataki, and Sebestýen, 2011).

First order change can be seen as amendments to a core system, these amendments could be termed as transactional, continuous, and adaptive. Levy (1986)identifies these as a process of minor improvements and adjustments, while Watzlawick et al. (1974) sees them as refining an existing process. In first order change, the system remains static, hence the term morphostatic change.

Second order change, or morphogenetic change, occurs when the system is transformed and creates a new morphology of the system. This nonlinear transformation is described as paradigmatic change, revolutionary change, qualitative change, and multi-dimensional change. In second order change, the element of leadership, and strategy, carry greater importance (Pádár, Pataki, and Sebestýen, 2011).

The process of leading change has seen multiple iterations from a top-down to a bottom-up approach, from intrinsically planned change, to accommodation change, including an unprecedented technological, organisational, and environmental change happening on the ground (Ratana, Raksmey, & Danut, 2020).

Leadership that was influenced by the individuals' personal attributes, can now be seen in practice, as mutual, collaborative, and discursive. The exertion of leadership is essentially collaborative, an intersection of activity and leadership practices that are an embodiment of dynamic, collective, situated, and dialectic (Raelin, 2016).

For the successful implementation of this initiative, the acceptance of alternative qualifications would need to be embraced in the training environment and in the construction industry. This would require a morphogenetic change to the government policy and in the recognition of workplace skills.

Chapter 6: Conclusions

This final chapter presents a brief précis of this mini-ethnographic case study followed by the conclusions derived from the findings and discussion. Key issues in recognition of prior learning (RPL) practice were identified through the literature review and were mirrored in the narrated experiences of the interview participants. In addition, the research findings presented further information regarding the homogenous subculture targeted in this study.

The interpreted data was used in the researcher's conceptual design of a group-based recognition of prior learning program specifically aligned with the low/non-qualified construction worker. This model implements the findings of Buddlemyer et al. (2012), in that it uses education as a driver to improve social inclusion and thus influences the continued re-engagement with education. These are important conceptual features of this RPL program model.

Research Summary

The purpose of this research was to investigate the culture of the low or non-qualified construction worker in the context of undertaking RPL. This is particularly important given the impending implementation of a government trade licensing scheme aimed at construction workers with a possible influential, effect on the social esteem of this cohort and the danger of thus exacerbating the suicide issue of approximately two males per day that exists within the Australian construction industry (ABS, 2017).

The collection and interpretation of the data focused on the experiences the participants were subjected to, and the meanings they represent within the RPL

experience, as a candidate, or as an assessor. A further focus was the impact a team environment could have on the candidates, the assessors, and the academic outcome of the RPL activity. The outcome of this research is a set of insights that have led to guidance for the fairer delivery of RPL, including group based RPL, and for further research into a best practice model of group RPL for identified cohorts.

Research Methods Summary

In a desire to gain a broad perspective on this research topic, within a resource- and time-constrained environment, a mini-ethnographic case study was utilised. Ethnography looked at the whole setting, not just the interactions within the setting.

This methodology facilitated investigation of group RPL practice within the specific homogenous sub-culture of the low/non-qualified construction worker and allowed insights from both the participant candidates and the participant assessors, which helped describe the anthropological culture, to generate meaning, and to inform a group RPL design (Fusch et al., 2017; Tunji, 2022).

As ethnography can be viewed as a method to collect research data (Creswell, 2012; Gray, 2012), and can be viewed as the outcome of the research activity; the studying and generating of theory in a real-world environment was a benefit of this mini-ethnographic research focus (Berg, 2001; Bryman, 2012).

With interviews and observations being a tenet of ethnographic research (Hammerson, 2010), the data was gathered via transcription of interviews, and the

observations of group RPL activities via field notes, observation checklists and photographs.

An integrated approach to data analysis was used in drawing out themes and meaning from the data, employing an interactive visual concordance, paralleled to a sound event recognition technique, and image processing analysis was developed to create a hybrid analysis identifying the dynamics of transmission, and expressive communication (Mokharti, Clark, & Henriss-Anderssen, 2013). This rich combination of ways of inspecting the data more deeply led to the discovery of the pragmatic and attitudinal meanings in the utterances (Hue, 2015). This greater identification of meaning led, in turn, to the drawing of accurate conclusions (Coskun, 2015) as described in Chapter Three.

The majority of previous studies identified fail to focus on the humanistic aspect of RPL, and regarded process as central, not feelings, care for the candidate or emotions, as Ker (2017) and Cameron (2013) have pointed out. The focus on humanity and culture is the ethnographic embodiment of this study.

The Industrial Context

The Victorian construction industry contributes approximately A$ 21.9 billion (AUD) into the economy via infrastructure projects and domestic housing, in response to the continuously increasing population in Victoria (State Government of Victoria, 2022).

Within this industry there are approximately 84,000 workers that are low-qualified, or unqualified, with the benchmark for qualification being a level III qualification.

This figure is based on the National Skills Commission (2020) data that shows that 35% of the workforce has low or no qualifications post-secondary school.

The State of Victoria will be implementing the trade licensing scheme (DELWP, 2020), which will drive many low-/non-qualified construction workers to either consider changing career, or to undergo a skills and knowledge recognition process to achieve the required licence. Unlicensed people who have previously been carrying out trade works will be unable to work in the industry, either as an employee, or self-employed. As the loss of employment is a critical factor influencing suicide in the construction industry (Heller et al., 2007; Inoue et al., 2007; Yur'yev et al., 2011), there is an urgent need for a suitable solution, a research-informed solution.

This research sought to identify whether a group based RPL system could provide a suitable solution for conducting RPL for this cohort.

The RPL Context

The recognition of knowledge and skills, irrespective of the location of this learning, emerged post World War 2 as a strategy to re-assess returned soldiers for job classification and to encourage the entry to further education (Doddrell, 2002).

This program, after many years' hiatus, re-emerged in the 1980s as a means to make visible the learning in the workplace in response to industry decline and the need for workforce renewal (Maher et al. 2010). As RPL evolved, the integration of mapping the prior learning to the competency schema created a de-clustering of skills and created a disconnect between the workplace environment and the RPL practice,

with a compliance-driven focus on documentation and little focus on the candidate's world (Cameron & Miller, 2004; Doddrell, 2002; McLaughlin & Mills, 2012; Smith, 2008).

The massification of RPL, in the absence of a design that would suit equity groups such as indigenous persons, those of non-English language background, and low- or non-qualified cohorts, began to decline during 2013, with policy changes resulting in a funding reduction of 75% in Victoria, and various policy changes to RPL in global locations with Portugal for example, closing their 90 RPL centres (Doutor, & Lucio-Villegas, 2014; Maher et al. 2010).

The rhetorical promise of RPL, implemented to encourage marginalised and disadvantaged groups to transition from informal to formalised education, failed to manifest, with policy and compliance removing judgement from the assessor and rendering the candidate powerless (Hamer, 2010, 2011).

Rosenhan (1973) argues that the consequences of being in a place that renders one depersonalised and powerless may create greater negative self-labelling—a real danger for this cohort. He insists that if we do not adopt a more intimate view of the candidate, and implement a personalised program, the relationship between the candidate and the assessor will remain distant. These people in different roles will become merely "us, them, they and we", a means of deflecting care and responsibility off the individual assessor to the collective assessor role, and seeing candidates as a distant other, as discovered in the discussion chapter in this thesis regarding assessor identity.

What the Research Found

The interviews and observations undertaken in this research captured examples of RPL experiences as a candidate, and as an assessor, that reflected the positive and negative issues regarding RPL practice identified from the literature review. In the observations and interviews the commonality between the two extremes was centred around care for the candidate, understanding the history of the candidate, and implementing personalisation into the RPL program—this was the concern of all.

At a micro perspective, the negative attitude of the assessor, or a poorly designed RPL program may have a devastating effect on a candidate from the cohort of the low/non-qualified construction worker. In an industry with the highest drug use and the highest suicide rate, the stoic exterior hides a fragile self that on the outside may be seen to brush off the assessor's attitude and program experience, however, may lead to tragic outcomes (Heller et al., 2007; Lowe, 2021; Milner et al., 2017).

From a meso perspective, the assessor behaviour may be a product of their induction to the education system, with performance mandated via observed practice, against a predetermined rubric, ensuring the system reproduces itself, an autopoietic society (Heidegger, 1962; Mariotti, 2002).

From a macro perspective, the program design may also stem from the policy intentions and implementations. These policy intentions underpin the funding, regulations, and directions of RPL implementations. In the view that RPL has a strong place in our education systems, the policy presents a discourse of positive and strong educational practice and future directions. However, RPL seems to be lost in

this discourse of the Australian Government's "Strengthening Skills" document (Commonwealth of Australia, 2019), that only refers to RPL in a historical context.

Despite the national discourse, in a State-wide review of education in Victoria (Macklin, 2020) the document presents the current arrangements of RPL as inadequate to drive the government's future directions and recommends the provision of RPL Hubs, a "One Stop Shop" in response to creating a best practice environment. Time will tell if this concept returns the desired outcomes without inadvertently massifying RPL practices, and again rendering some cohorts invisible. History shows us this concept was the backbone of the RPL system in Portugal with over 90 RPL centres in 2012, however, this massification of recognition of prior learning was politically viewed as an excessive practice that risked social credibility. This led to the RPL centres closing in March 2013 (Doutor & Lucio-Villegas, 2014).

With the micro, meso, and macro perspectives in mind, this mini ethnographic case study presents the culture of the low/non-qualified construction industry with a major consideration in designing a solid program that addresses the impending trade licensing government initiative and the socio-economic standing of the candidate and creates a positive impact on the suicide rate in this industry.

This research identified influential features of the low/non-qualified construction worker that informed the construction of a conceptual group RPL model and in particular the features that influenced the success of the observed group based RPL activities. These features are:

1. Assessor Competence
    i. The assessor is responsible for implementing consideration of diversity and providing care and understanding for the candidate.
2. Candidate identity
    i. Recognising the individual candidate holds a range of cultural and emotional nuances.
3. An evolved RPL practice and the emergence of Group RPL in tune with the industry environment.
    i. An RPL practice embracing a broad range of evidence, aligned with alternative credentials and industry-recognised certification,
    ii. Assessment practices cognisant of the construction industry's teams' culture— "their collective capacity".

When one is employed in the construction industry as a trade worker, the focus is on the practical output of the work, therefore, the assessment should align and include practical assessments of skills, in lieu of the knowledge-based assessments that predominate RPL practice.

The candidate utilises the construction tools and artifacts in everyday life, so reason directs the logical use of the same artifacts and texts in the assessment activity. Utilising a simulated work environment provides opportunities for the candidate to be exposed to the differing forms of distributed cognition in aiding memory, including neural, social and technology artifacts (Michaelian & Sutton, 2013; Zhang. J., 1997; Zhang, J. & Norman, 1994).

The language of RPL was also an identified factor in the success of RPL practice with the analysis of documents and discussions with research participants presenting the prevalence of educational speak, as a reflection of the training package terminology and policy language.

The use of plain speak, or a vernacular aligned with the subject cohort's workplace can reduce apprehension and create confidence in the candidate. Implementing strategies like multiple choice questioning utilising language familiar to the candidate also creates confidence and acts as an external representation of distributed cognition (Zhang, J., 1997; Zhang, J. & Norman, 1994), in assisting their memory.

The research found that the candidates who undertook group based practical RPL assessment activities achieved a greater success rate than with the individual activities, given that with the participants in Observation One, an individual practical assessment activity conducted in a small group of four participants (all doing the task separately), only one participant completed the assessment and the other three displayed self-confidence issues, observing each other's practice with an eventual series of common mistakes being presented in each of their work. In contrast, the success of the group-based project in Observation Two can be attributed to the social distribution of cognition (Michaelian & Sutton, 2013) made possible by the shared task, familiar language and tools, and a positive workplace environment providing confidence.

A Model for Group RPL

This researcher designed conceptual Group RPL program was informed by the literature review, the conducting of the research, and the analysis of the findings.

This model also implements the findings of Buddlemyer et al. (2012), in utilising a Certificate III qualification as a driver to improve social inclusion and to influence the continued re-engagement with education. These are considerations of this conceptual RPL program, designed out of this research, that are detailed in the discussions chapter.

A detailed version of the researcher designed Group RPL model that was derived from this research is presented in the appendices. Appendix 32 presents a model of implementation for group RPL.

Stage One, Licensed Construction Trade

This allows the individual to work only for an employer and not be self-employed or be a sub-contractor.

This is the most challenging model in engaging the low/non-qualified construction worker. This phase needs to be considerate of the cohort, be seen as achievable, non-threatening, and aligned with workplace activities, utilising a vernacular without educational jargon. In brief, its characteristics include:

- Commencing with an assessment free environment, allowing group discussion, group learning, and group skills practice in a non-threatening environment for the candidate.
- Creating a dialogic model in a social environment in validating the candidates' knowledge at a basic requirement.
- Implementing multiple choice knowledge assessments.

- Utilising individual or group practical assessments, mapped to an “alternative credential” in validating skills to reduce the compliance and regulatory environment associated with a national qualification.
- Phase One could be seen as a transitional phase to the formality of a national qualification and practitioner registration requirement in Phase Two.

Stage Two, Registered Practitioner (Limited).

This phase allows the individual to undertake subcontract work for a registered builder, or a private client up to the value of $10,000. This phase scaffolds from the previous, building on the confidence of the candidate and implementing increased rigour. This phase integrates the nationally recognised Certificate III trade qualification and undertakes limited elements of Certificate IV, enabling successful candidates to apply for practitioner registration.

Characteristics are:

- This phase/stage is a pathway from the achievements of Stage One into the formal, nationally accredited Certificate III trade qualification and evolves from a social environment to include practical group and individual assessment activities in achieving the remainder of the Certificate III.
- The integration of some Certificate IV units’ learning and assessments. This can be achieved by integrating these units into the Certificate III units and extending the delivery, while remaining in the familiarity of the practical Certificate III environment.

- The inclusion of an educational vernacular, in preparing the candidates for Phase/Stage Three, and further education.
- The commencement of a portfolio.

Stage Three, Registered Practitioner (Unlimited).

This allows the individual to undertake works for a registered builder, or a private client with no limit on the value. There is, however, the need for consumer protection insurance. Characteristics are:

- Continues candidate development via the continuation of this conceptual model with the inclusion of Diploma of Building units in meeting the requirement of the VBA, Builder registration.
- The development of a portfolio
- Provides a grounding for continued education.

This model, at its most basic stage (Phase One), aims to create an engaging pathway for the identified cohort to gain certification and licensing, allowing the continuation of work and employment, without which social exclusion may be exacerbated. The fear of losing employment is identified as a key risk factor leading to suicide in the construction industry (Heller, et al., 2007; Inoue, et al., 2007; Yur'yev et al., 2011).

Recognising the prior knowledge and skills of adult workers with low or no qualifications can provide them with the confidence to re-engage with education, reducing their marginalisation.

As identified in the literature and in the data collected, via interviews, the author's professional life narratives, and the casual conversations within this professional life, it has been found that the application of the recognition of prior learning has been reduced. With audit requirements having risen to a seemingly unworkable level as a result of the corrupt and fraudulent practices that in some instances have plagued RPL over the last decade, one could think that RPL is at risk of becoming extinct. The integration of alternative qualifications may be a suitable response to re-implementing RPL in a non-threatening, social, and supportive group environment for this cohort.

Limitations of the Study

Limitations of this study are related to restrictions imposed by the increased difficulty of a COVID19-disturbed research, with access to participants being reduced and travel to assessment sites to observe RPL assessments being removed for almost two years. The research was restricted to interviewing and observing a small number of participants (21 in all).

This research was also limited by a demographic element, this being the lack of a female sample of low or non-qualified construction workers to participate in the study. The inclusion of female construction workers may identify differing

perspectives on RPL and group RPL processes. Moreover, the research did not speak with Indigenous workers or those with a disability.

As this research is specific to the construction industry, the generalisability of the findings may not transfer to other industries, or cohorts.

Future Enquiry

Theoretically, the recognition of prior learning conducted as a group activity anticipates further examination and is still in its formative construct.
This study provides a model of research to apply to the desired cohort and industry, utilising a multiple media analysis that identifies and validates greater meaning and understanding.

The next step relates to the implementation of the group RPL model designed and proposed in this research. The theories of change management should be investigated in the context of this new group RPL model to enable a level of success in policy change and in the recognition of workplace skills.

Conclusion.

This research aimed to make an important contribution to the construction industry and its workers by addressing the factors associated with the impending construction trade licensing scheme. The risk of low socio-economic status, due to low income and limited career opportunities, persist for these workers and this may increase the already

prevalent drug use in the industry (Lowe, 2021), and increase the suicide rate in the industry (Heller et al., 2007; Milner et al., 2017), due to the trade licensing scheme restricting employment for many individuals currently working in the Australian construction industry.

Using an influence by Buddlemyer et al. (2012), that the completion of a Certificate III qualification can have a positive impact on social inclusion, this study explored a way in which low/non-qualified construction workers can achieve higher qualifications, such as the Certificate III, through Group RPL, in response to the impending trade licensing requirements.

The literature review focused on RPL and the concept of Group RPL and created a series of questions to be addressed in this research. In answering these research questions, this research employed a mini-ethnographic case study approach to understand the construction worker within the cultural context within the boundary of a case study.

The in-depth investigation into group RPL practice with the construction industry cohort, gathered data from experienced assessors and RPL candidates in the construction industry via interviews with participants reflecting on their experiences in relation to RPL and group RPL. Observational data on the interaction that occurs between assessors and candidates in a group RPL activity was also sourced. The researcher's personal narrative provided a reflective lens on the RPL process.

Analysis utilising a combination of Interactive Visual Concordance, Sound Event Recognition, and Image Processing Analysis, contributed to the themes of assessor competence, candidate identity, the relationship between assessor and the candidate and the concept of group RPL.

This research identified influential features of the low/non-qualified construction cohort and found that the candidates who undertook group based practical RPL assessment activities achieved a greater success rate than when RPL activities were conducted with individuals.

The research findings and analysis led to the researcher developing and presenting a three-staged model of group RPL aligning with the stages/phases to the levels of licensing proposed in the impending implementation of the Victorian Governments Trade Licensing scheme. This model responds to the research questions and implements the identified best practice of RPL activities, with consideration of the current RPL issues and implements a Group RPL strategy in creating engagement, aiding memory, creating inclusion, and providing success for the currently low/non-qualified construction workers.

In May this year (2022), I received an email in my professional role, as acting Dean of a Trade Faculty at a major Victorian TAFE, from a Victorian Government department requesting expressions of interest in designing the assessments related to the impending trade licensing scheme. This highlights the significance and relevance of this research and the positive impact this research may have on the industry and society. The next step is to share the knowledge gained from this research to relevant professional publications, conferences, and seminars in order to publicise the idea so that experienced tradesman and construction workers that are disadvantaged could obtain qualifications; it is a more inclusive method than at present.

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Appendices

1. Research Observation Checklist-Assessor.

This form utilises descriptive categories for observation of a group RPL practical activity. Comments may be used by the observer to explain their observation and to provide reflection and additional insight.
The following categories and items represent several possibilities for a group RPL activity.
Not all need to be applied in the activity as to avoid rigid determinations regarding what is to be observed, and to let the observed data drive further categories and/or amendment of categories.

ASSESSOR ORGANIZATION	ASSESSOR MATERIALS
☐ The assessor knows how to use the educational technology needed for the assessment. ☐ The assessor posts group instructions and objectives on the board or a slide. ☐ The assessor gives specific instructional outcomes for the RPL activity. ☐ The assessor provides an outline of the organization of the RPL activity. ☐ The assessor summarizes assessment instructions periodically. ☐ The assessor revisits objectives at the end of assessment. ☐ Candidates are made aware what preparation they should complete prior to the RPL practical assessment. CONTENT KNOWLEDGE	☐ Handouts or digital resources are appropriate. ☐ The assessor gives assistance or insight into reading or using assigned instructions. INSTRUCTIONAL STRATEGIES ☐ The assessor provides explicit directions for the practical RPL activity. ☐ The assessor allows enough time to complete the activity. ☐ The assessor specifies how RPL activity will be assessed. ☐ The assessor mediates conflict or differences of opinion and encourages candidates to do the same. PRESENTATION ☐ The assessor can be seen and heard.

- ☐ The assessor's statements are accurate according to the standards of the field.
- ☐ The assessor communicates the reasoning process behind RPL activity.

RESPONSIVENESS TO CANDIDATES

- ☐ The assessor addresses candidates by name, as possible.
- ☐ The assessor uses positive reinforcement.
- ☐ The assessor incorporates candidate ideas into the activity and assessment.
- ☐ The atmosphere of the activity is participative.
- ☐ The assessor is available before or after the activity.
- ☐ The assessor models good listening habits.
- ☐ The assessor demonstrates flexibility in responding to candidates concerns.
- ☐ The assessor is sensitive to individual abilities.

CREATING INCLUSIVITY

- ☐ The assessor creates an equitable and inclusive environment regardless of ethnocultural, gender, candidate abilities and faith differences.
- ☐ The assessor speaks at a pace that allows candidates to comprehend what has been said.
- ☐ The assessor is enthusiastic about the assessment activity.
- ☐ The assessor uses humour appropriately.

CLARITY

- ☐ The assessor elaborates or repeats complex information.
- ☐ The assessor makes explicit statements to draw candidates' attention to certain instruction.
- ☐ The assessor pauses during explanations to allow students to ask questions.

INSTRUCTION IN ASSESSMENT SETTINGS

- ☐ The assessor is thoroughly familiar with assessment tasks.
- ☐ The assessor is thoroughly familiar with the tools and equipment used in the assessment activity.
- ☐ Procedures are clearly explained.
- ☐ The assessor provides aid with interpretation of instruction.
- ☐ Assessments are of appropriate level.
- ☐ Criticism of techniques is constructive.

☐ The assessor conveys openness and warmth and encourages candidates to interact with others the same way. ☐ The assessor uses technology to provide additional visual, oral, aural and/or physical supports for candidates who need them. ☐ The assessor uses a variety of assessment tasks so that candidates with different learning styles can achieve success. ☐ The assessor provides accommodations for candidates who require additional explanations or extra time.	☐ The assessor's emphasis on safety is evident.

Comments

(Adapted from Mertens, 2005 and University of Toronto 2021)

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2. Survey Questions and Response.

- Collector: Social Media Post 1 (Facebook Link)
- Started: Friday, February 21, 2020 2:42:54 PM
- Last Modified: Friday, February 21, 2020 2:51:29 PM
- Time Spent: 00:08:35

Q1

Are you or have you been a Recognition of Prior Learning participant or assessor?

Include a list of your experiences of these.

- *RPL Assessor*

Q2

Can you tell me how you became involved in RPL?

Through my work.

Q3

What does RPL mean to you?

Skills gained over many years but not properly acknowledged. This process

acknowledges and certifies the skills

Q4

How do/did you feel about the RPL process?

If it's done correctly, it's a valuable process

Q5

What is your current work and how did you get into this work?

I work in Training and further education. By luck.

Q6

What has been your experience in education?

15 years. As a teacher

Q7

How much power or control do you see yourself having in the RPL process (as a participant or as an assessor)?

As an assessor. A very large amount.

Q8

Have you ever experienced an RPL activity in a group setting (several participants clustered together during all or part of the process) ?

- *Yes*

Q9

What form of RPL would be useful for people who have not been engaged in education for some time and/or prefer to work in teams, and/or have had negative experiences with education? What are your thoughts on RPL for these people? Do you think RPL conducted as a group activity would work for them? Refer to positives and negatives in your response.

I think if you are assessing someone it should be done individually as the skills and knowledge need to be determined. In a group some people may not demonstrate the skills and knowledge.

Q10

Please add any relevant comments or information you believe will assist in RPL process design.

My view is there needs to be a various range of assessment options as people will demonstrate their abilities in different ways.

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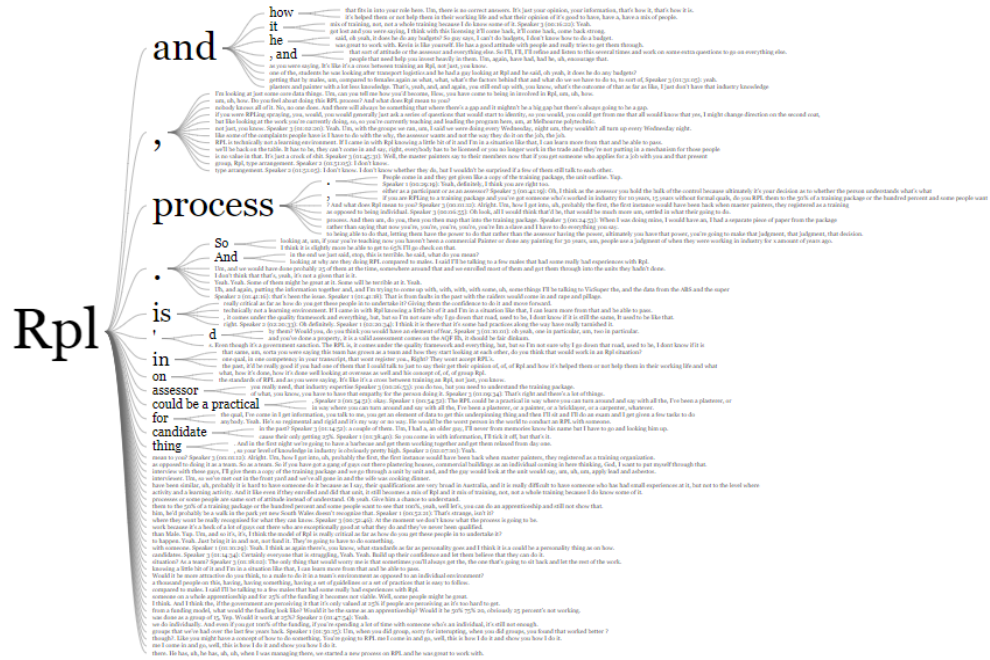
3. Neil, RPL IVC.



Appendix 3, Neil, Word Tree, Jasondavies.com 2021.

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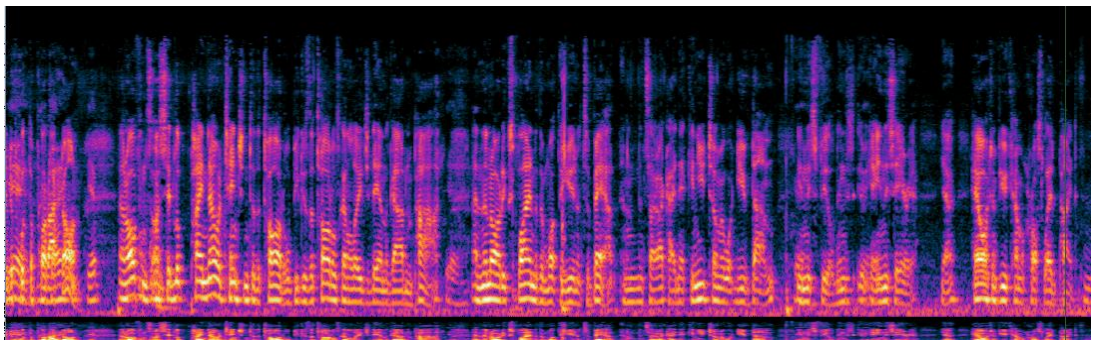
4. Neil, Spectrogram average representation.



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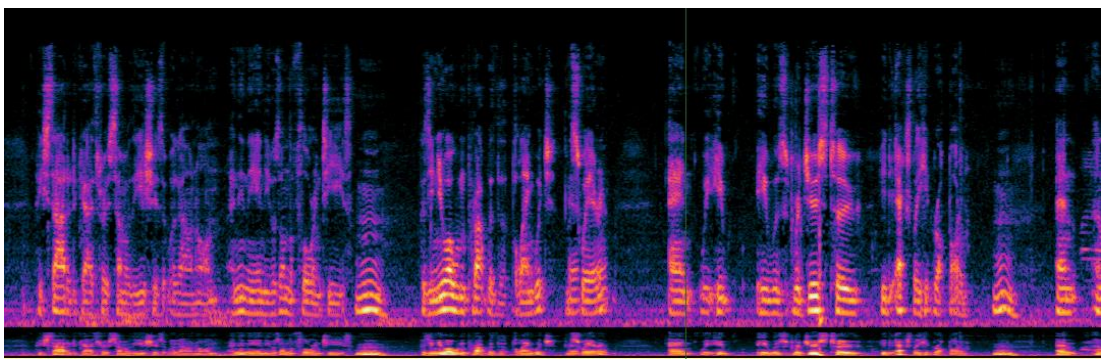
5. Neil, Spectrogram Emotive, Difficult student.



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6. Neil, SER Difficult student.

with. He, um, he would put these defense mechanism was to start abusing everybody when he couldn't cope and he'd stand at and he'd scream his lungs out and he'd be abusing everybody. And finally I'd had enough of him. Yeah. We, Gail would be on the phone that they could hear his swearing. Yeah. And I'd warned him a few times.

Neil ▸ 38:33

That's it. You're out of d. And then we came back in, he went in to get his gear and he's, and he's walked into the toilet and one of the other teachers walked in, he's was in there and he's carrying on. He'd come back out and said to me, Oh, I want to speak to you alone. And I said, well, that's not [39:04] rtainly sit down and have a chat. So we walked out the back and I had another te[illegible]d to go through some of the issues that were going on. And in the end he was on the floor in tears because he knew I wouldn't put up with the language and swearing and we, he, he was reduced to, he'd actually hit rock bottom.

Neil ▸ 39:14

And I said, well, why didn't you come and tell me this weeks ago? And I said, let's start putting things in place and we'll get you through. In the end I was his best mate. He come in and talk to me? And, and yeah. And I thought, what a turnaround with this kid. He got through, he got through and he had some real issues. Yeah. He had some real, and you could see. His only defense. He knew was to fire up because then people would back away and stop having a go at him and it wasn't till actually said I'm not putting up with that. Let's get to the nitty gritties of it. Yeah.

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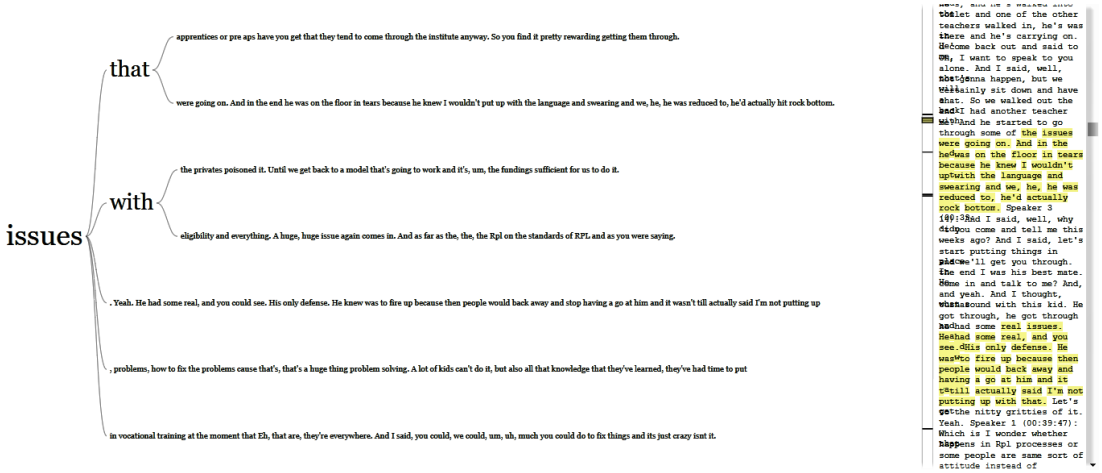
7. Neil, IVC Difficult student.



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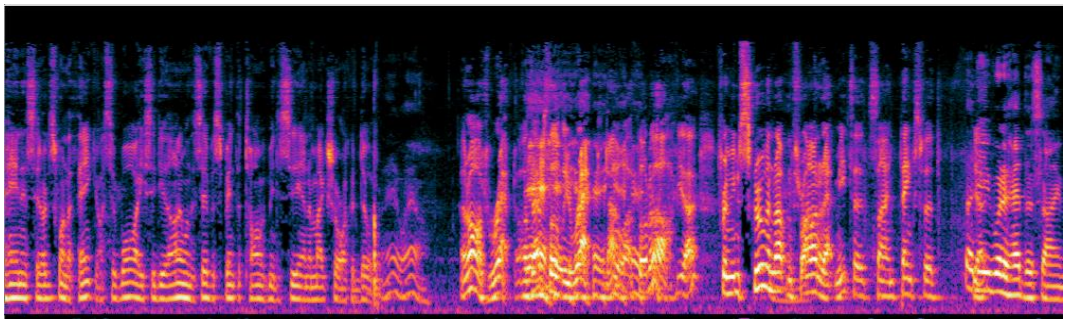
8. Neil, Spectrogram Tonal Change to Positive Outcome.



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9. Ross, RPL IVC.

Appendix 9, Ross, Word Tree, Jasondavies.com 2021.

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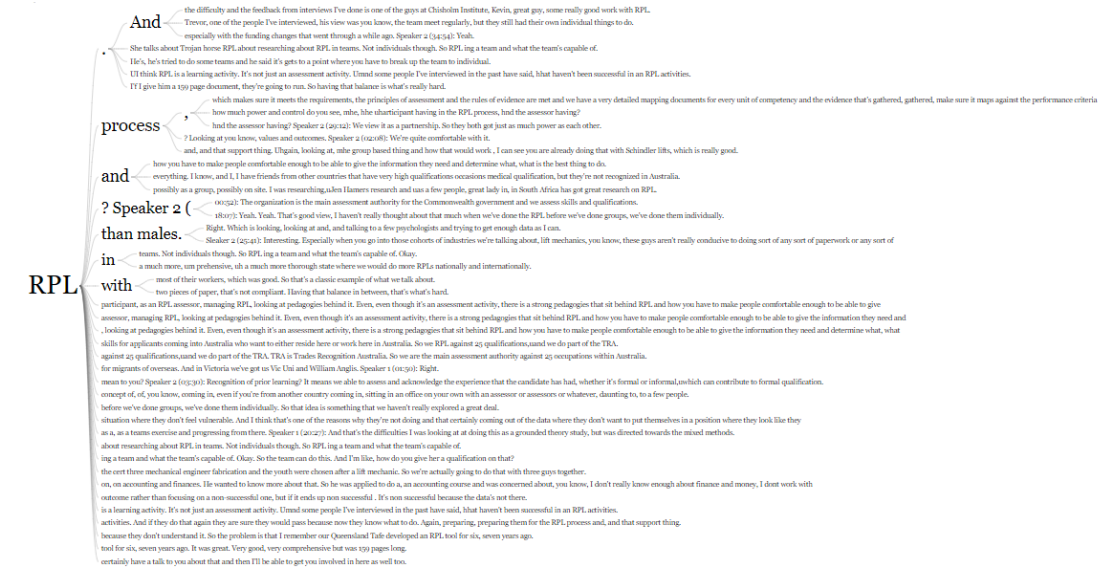
10. Richard, RPL IVC.



Appendix 10, Richard, Word Tree, Jasondavies.com 2021.

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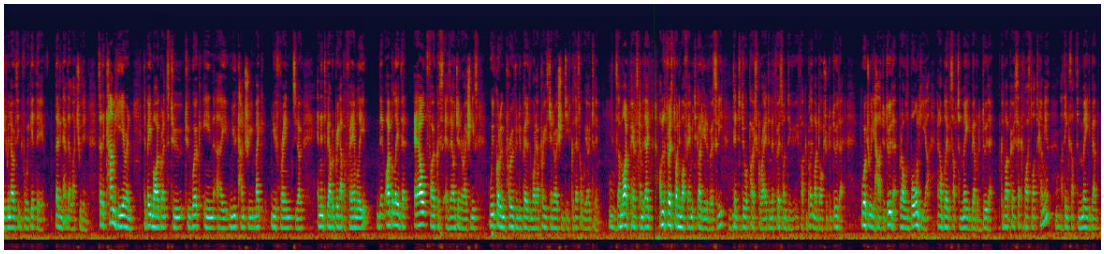
11. Richard, Heightened Tone, Family Discussion.



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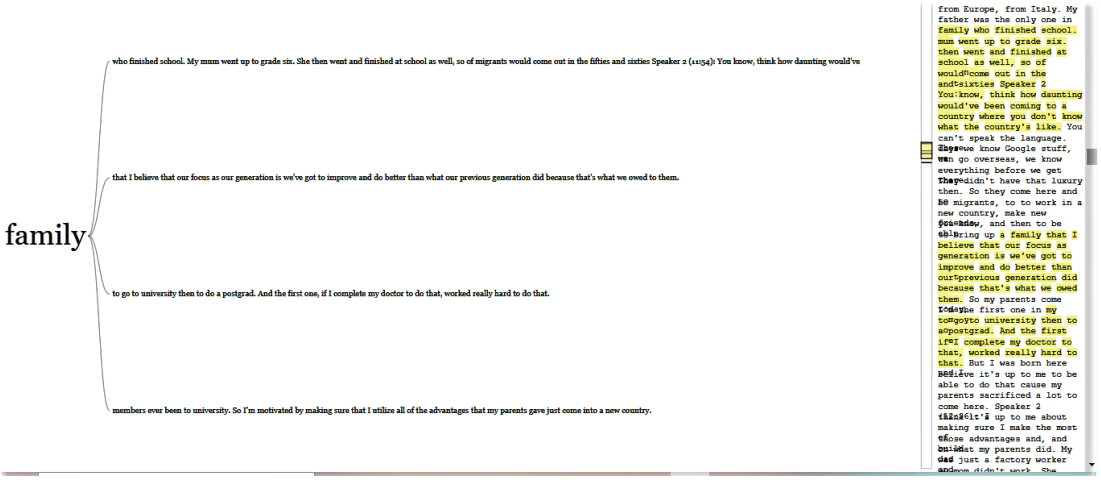
12. Richard, Family Discussion IVC.



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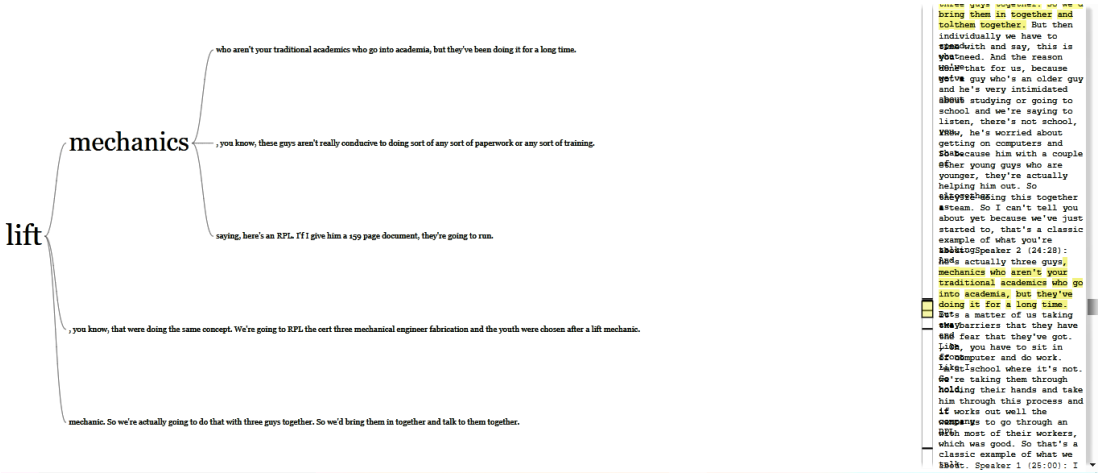
13. Richard, Group RPL IVC.



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14. Richard, Group RPL SER.

Richard ▸23:41

We've taken on a project just recently w [redacted] at were doing the same concept. We're going to, um, RPL the cert three mechanical engineer fabrication and the [redacted] mechanic. So we're actually going to do that with three guys together. So we'd bring them in together and talk to them together. But then individually we have to spend time with and say, this is what you need. Um, and the reason we've done that for us, because we've got a guy who's an older guy and he's very intimidated about about studying or going to school and we're saying to listen, there's not school, you know, he's worried about getting on computers and that. So because him with a couple of other young guys who are younger, they're actually helping him out. So altogether they're doing this together as a team. So I can't tell you about yet because we've just started to, that's a classic example of what you're talking about.

Richard ▸24:28

And it's actually three guys [redacted] who aren't your traditional academics who go into academia, but they've been doing it for a long time. Um, but it's a matter of us, um, taking away the barriers that they have and the fear that they've got. Like, Oh, you have to sit in front of computer and do work. Like I'm at school where it's not. So we're taking them through hold, holding their hands and take him through this process and if it works out well the company wants us to go through an RPL with most of their workers, which was good. So that's a classic example of what we talk about.

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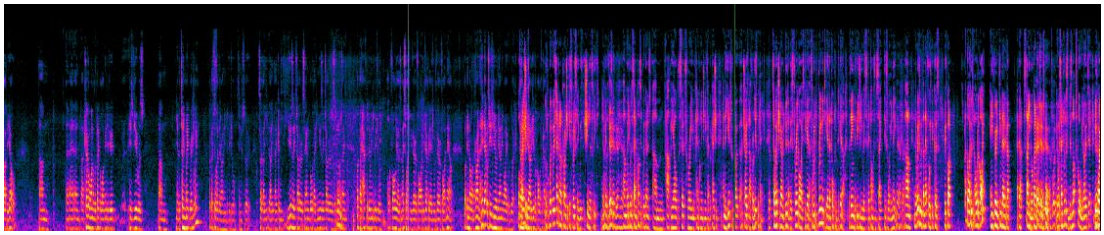
15. Richard, Group RPL Spectrogram to Heightened Tone.



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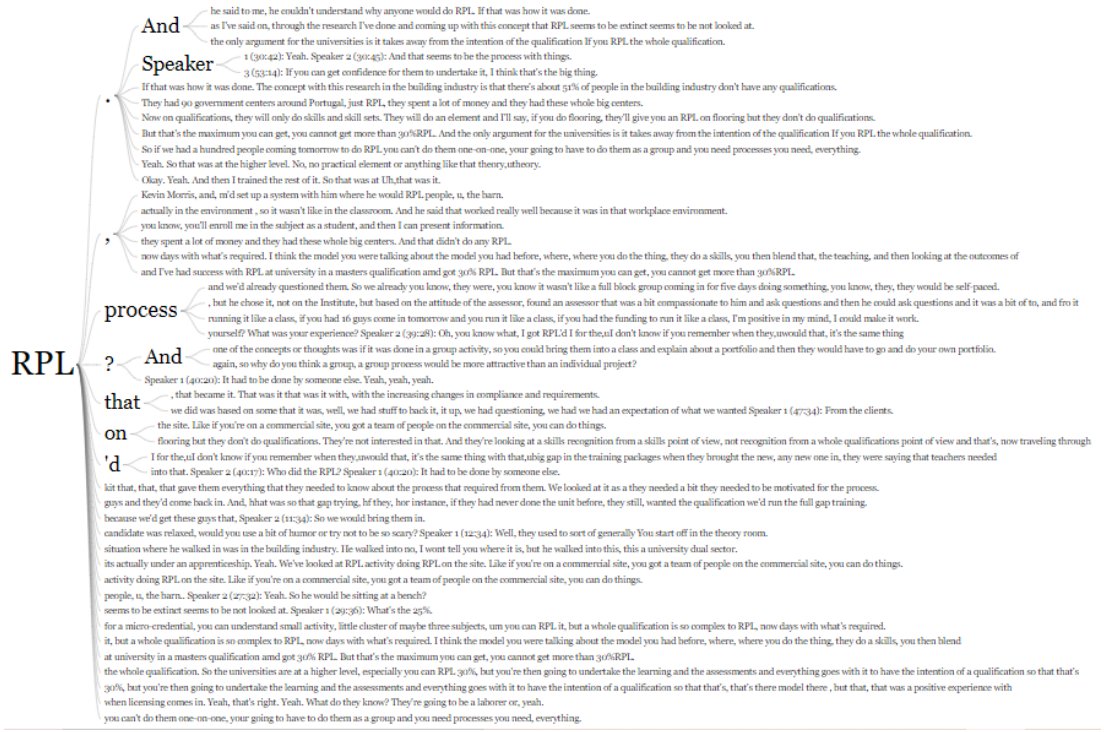
16. Owen, RPL IVC.



Appendix 16, Owen, Word Tree, Jasondavies.com 2021.

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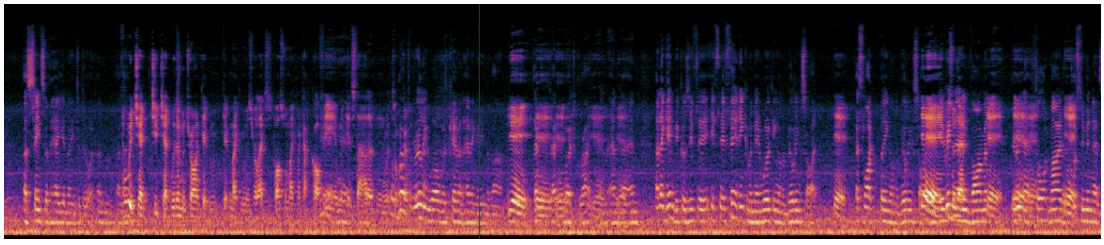
17. Owen, Spectrogram low emotive.



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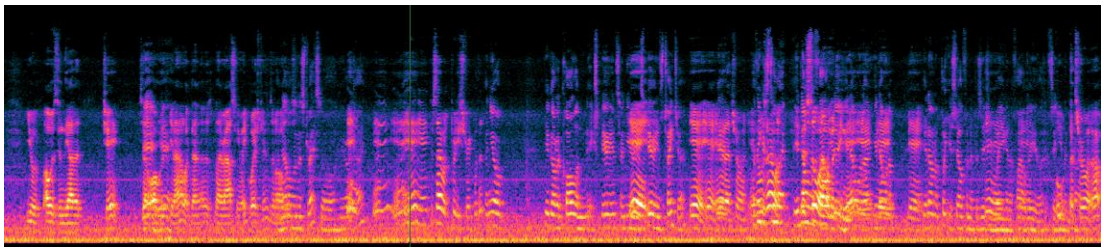
18. Owen, Spectrogram High Emotive.



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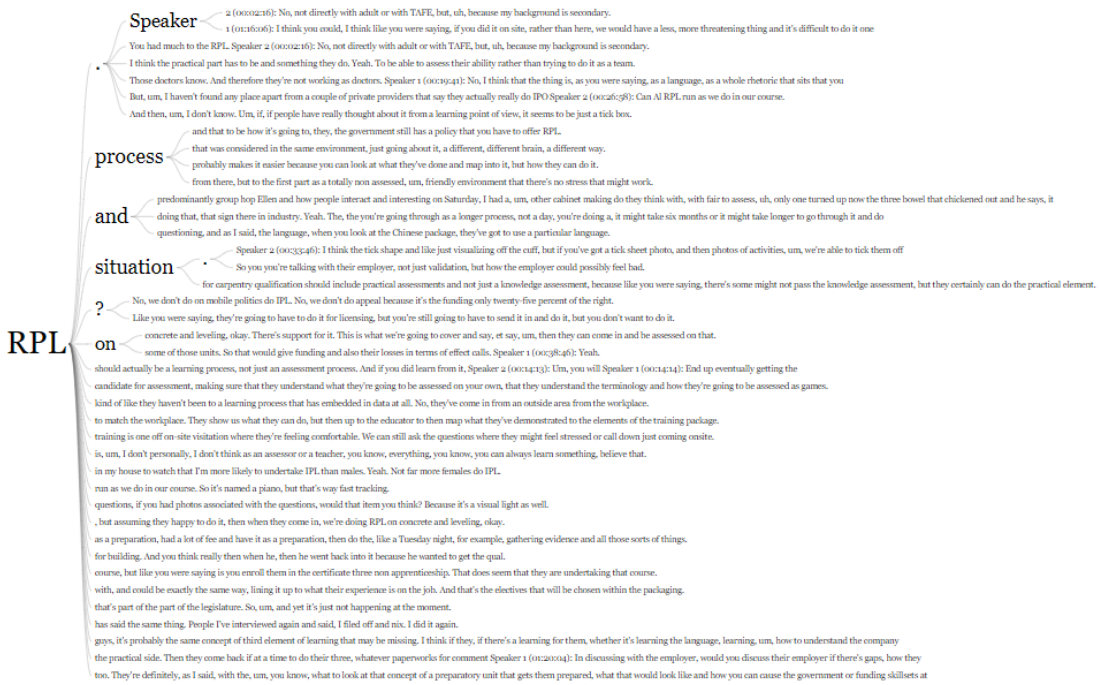
19. David RPL IVC.



Appendix 19, David, Word Tree, Jasondavies.com 2021.

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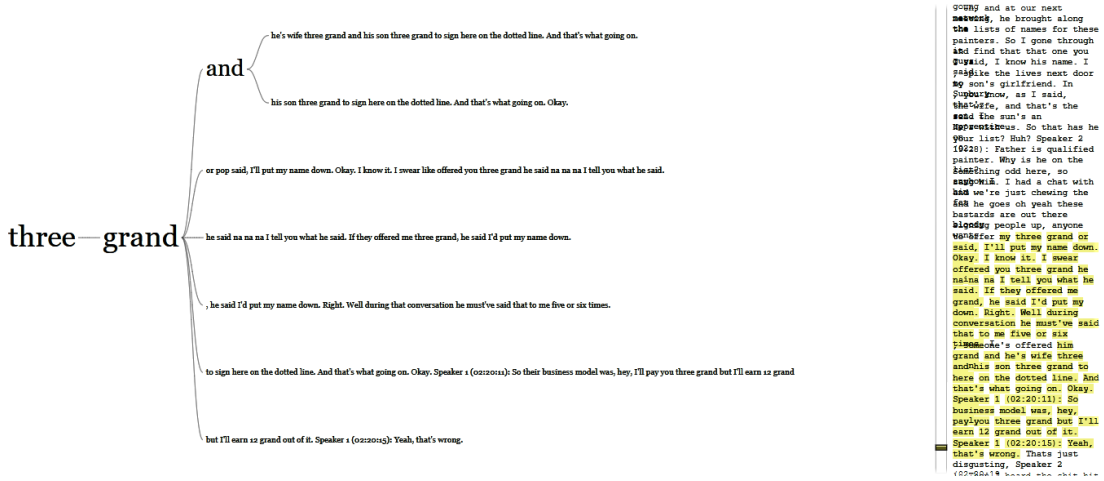
20. Unscrupulous RPL IVC.



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21. Unscrupulous RPL SER.

three and we dont know who they are, He has, it was 45, names, above all our other apprentices. we dont know who they are... I said No. So they started asking questions and it turned out that they had some little crackpot third party deal going. Uh, and at our next network meeting, he brought along the the lists of names for these painters. So I gone through it and find that that one you guys I said, I know his name. I said, spike the lives next door to my son's girlfriend. In Sunbury, you know, as I said, that's the wife, and that's the son. I said the son's an apprentice. He's with us. So that has he on your list? Huh?

▸ 02:19:28

Father is qualified painter. Why is he on the list? Something 02:19:48 im. I had a chat with him and we're just chewing the fat and he goes oh yeah these b signing people up, anyone wants to offer my three grand or pop said, I'll put my name down. Okay. I know it. I swear like offered you three grand he said na na na I tell you what he said. If they offered me three grand, he said I'd put my name down. Right. Well during that conversation he must've said that to me five or six times. I, someone's offered him three grand and he's wife three grand and his son three grand to sign here on the dotted line. And that's what going on. Okay.

Speaker 1 ▸ 02:20:11

So their business model was, hey, I'll pay you three grand but I'll earn 12 grand out of it.

▸ 02:20:15

Yeah, that's wrong. Thats just disgusting,

Chat

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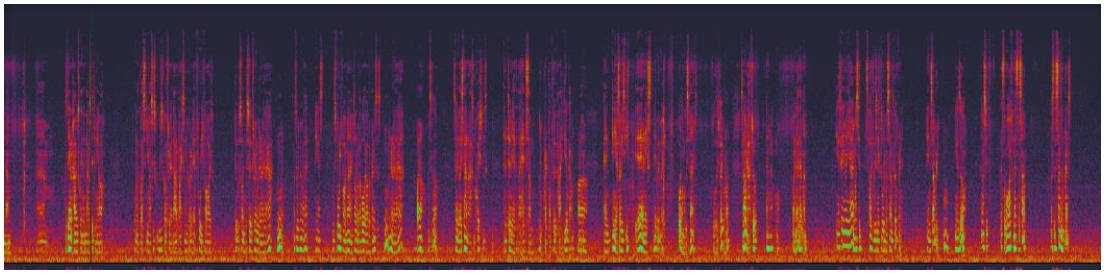
22. Unscrupulous RPL Spectrogram Low Emotive.



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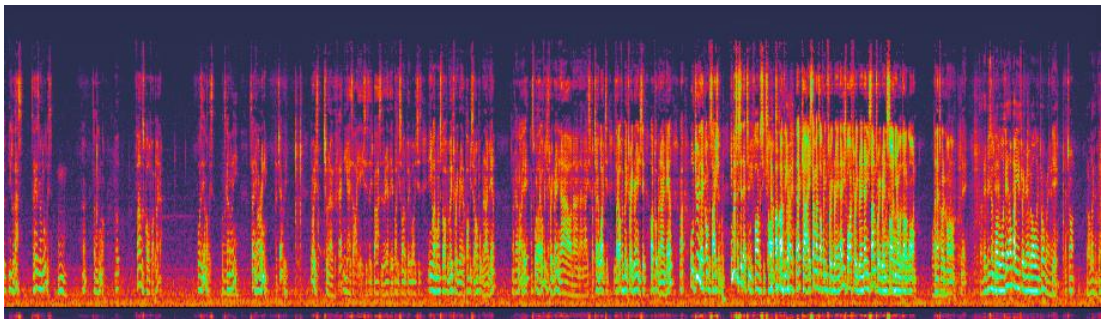
23. Unscrupulous RPL Spectrogram Low Emotive to Anger.



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24. Observation 1, Workshop Layout.

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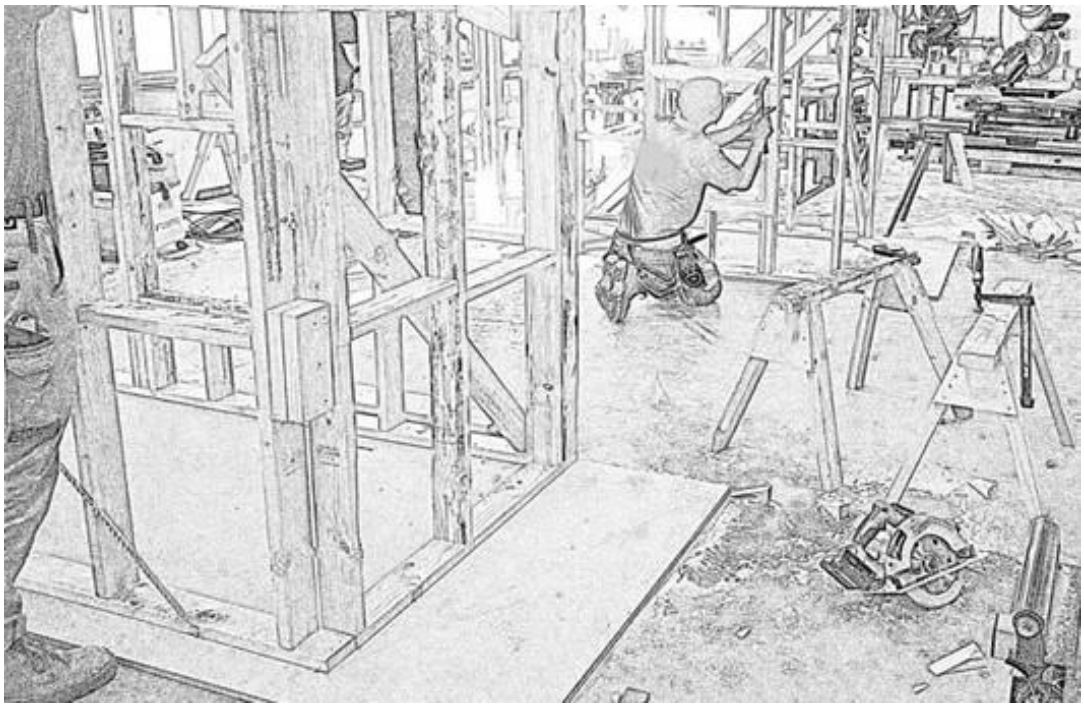
25. Observation 1, Candidate Progress.



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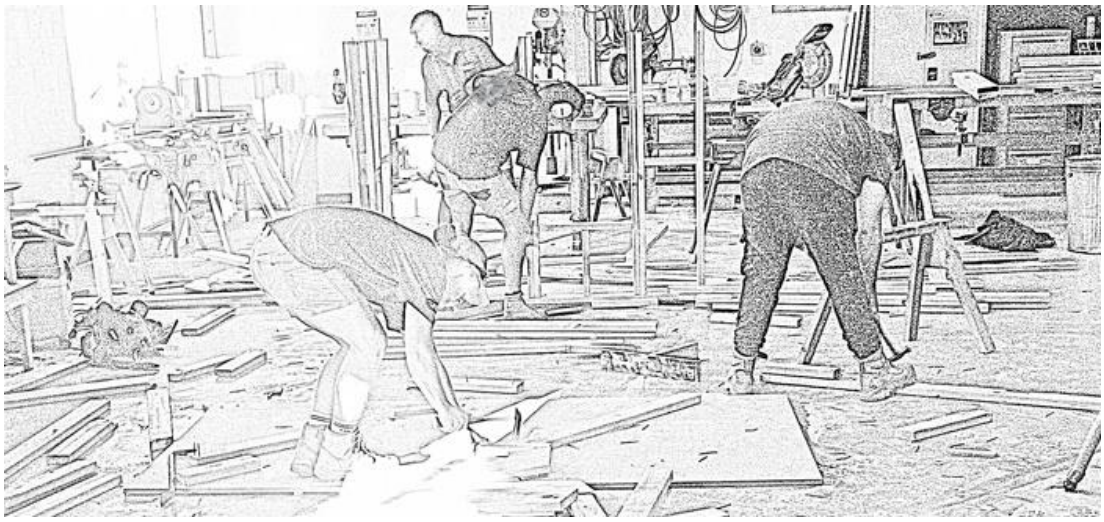
26. Observation 1, Team Clean Up.



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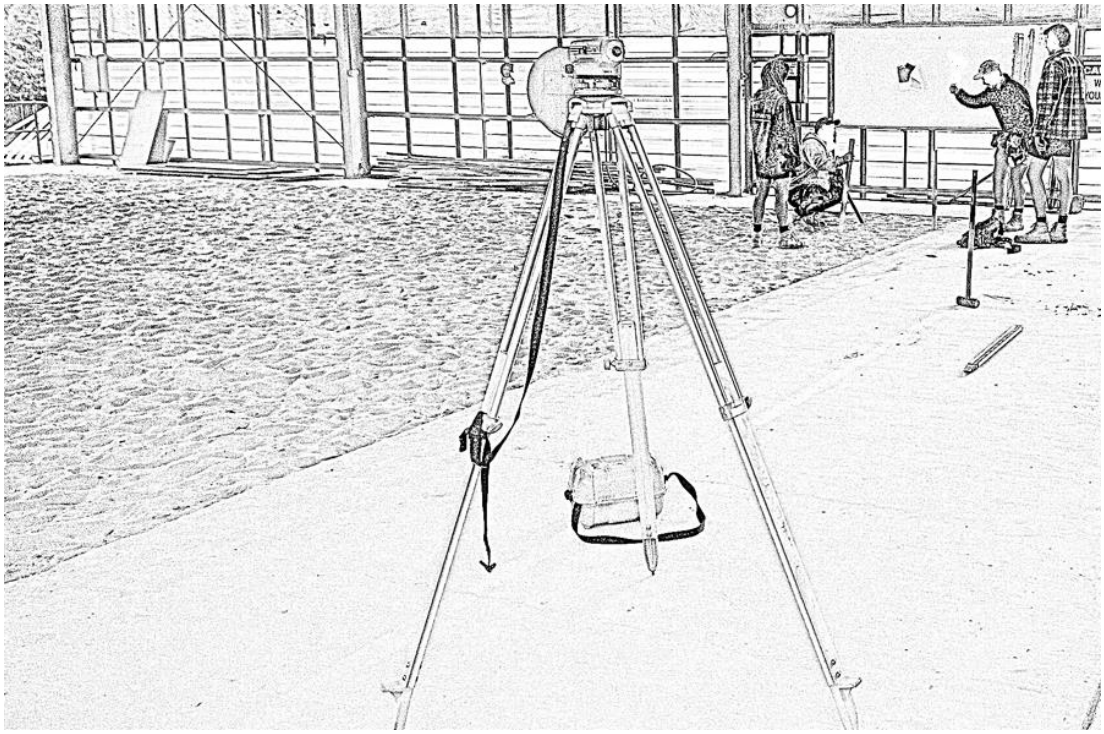
27. Observation 2, Group Discussion re Assessment Activity.



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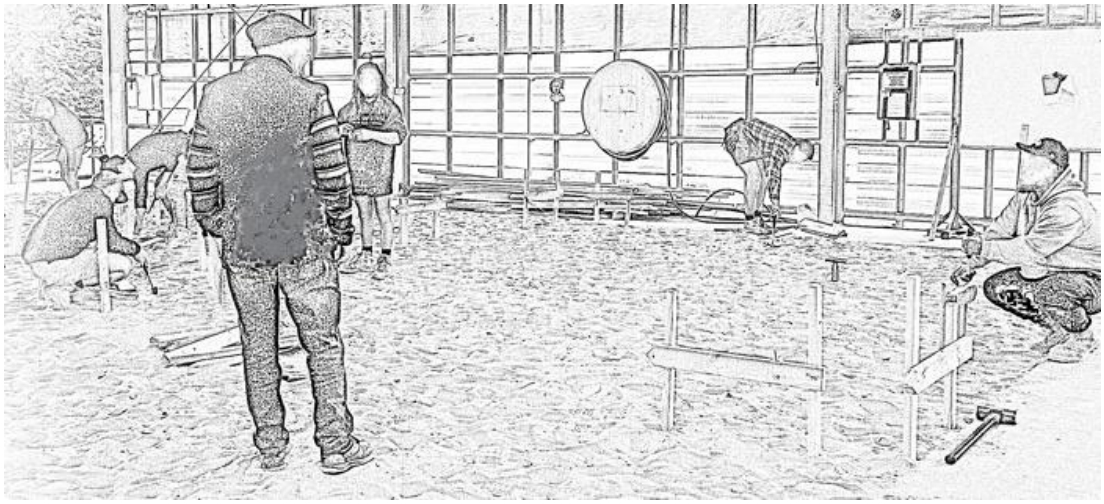
28. Observation 2, Candidate Task Rotation.



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29. Observation 2, Group Feedback.

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30. Observation 3, Assessor Questions Candidate.

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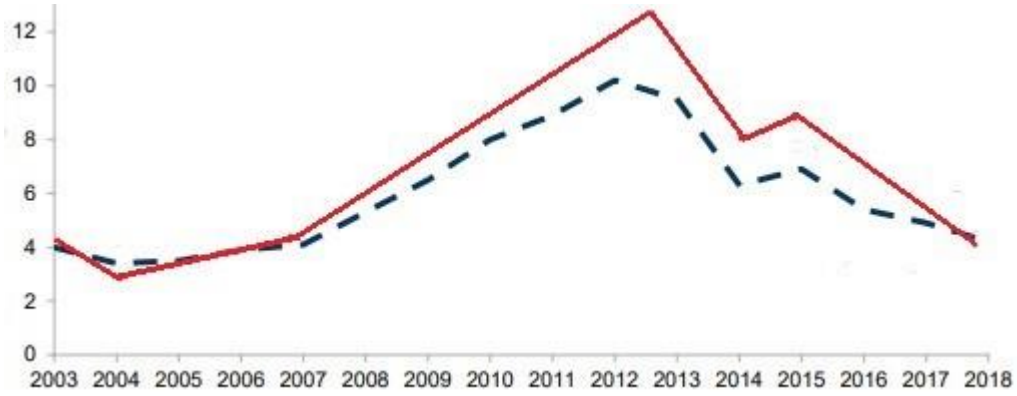
31. Australian Government Funding to RPL 2003-2018.



Rate of government funding for RPL

Proportion of successfully completed Certificate III competencies.

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32. Researcher Designed Group RPL Model.

The impending trade licensing scheme, to be implemented in Victoria, becomes an impetus for many existing construction workers to have their skills formally recognised (The State of Victoria Department of Environment, Land, Water and Planning [DELWP]. (2020).

This conceptual model is a research based RPL program that may address some of the current issues pertinent to the low/non-qualified construction worker via a deep understanding of the cohort and the inclusion of learning and the pedagogies associated into RPL and group assessment practices.

The research determined influential features of the low/non-qualified construction worker that informed the researchers construction of a conceptual group RPL model,

1. Candidate identity.
    i. Recognising the individual candidate beholds a range of cultural and emotional nuances.
2. Assessor Competence.
    i. The assessor is responsible for implementing diversity, care, fairness, and understanding for the candidate.
3. RPL practice evolved and the emergence of Group RPL and the industry environment.
    i. An RPL practice embracing broad evidence, aligned with alternative credentials and industry recognised certification,
    ii. Assessment practices cognisant of the construction industries teams' culture, "their collective capacity".

As the candidates are working in the construction industry as a trade worker, the focus is on the practical output of the work, therefore, the assessment should align and include practical assessments of skills in lieu of the knowledge-based only assessments that predominate RPL practice.

The candidates utilise construction tools (artifacts), and a construction industry text in everyday life, so reasoning directs the logical use of the same artifacts and text in the assessment activity. Conducting the RPL activity in a simulated work environment provides familiarity for the candidate and exposure to the differing forms of distributed cognition in aiding memory; being neural, social and technology artifacts (Michaelian & Sutton, 2013) (Zhang. J, 1997), (Zhang. J & Norman. D, 1994).

As the language of RPL was also an identified factor in the success of RPL practice, with the analysis of documents and discussions with research participants presenting the prevalence of educational speak as a reflection of the training package terminology and policy language. The use of plain speak, or a vernacular aligned to the subject cohort, can reduce apprehension, and create confidence in the candidate. Implementing strategies like multiple choice questioning utilising a familiarity of

language aligned to the candidate also creates confidents and acts as external representation of distributed cognition in assisting their memory (Zhang. J, 1997), (Zhang. J & Norman. D, 1994).

The research found that the candidates who undertook group based practical RPL assessment activities achieved a greater success rate than the individual activities, aligning with the social distribution of cognition (Michaelian, K, and Sutton, J, 2013), reflecting the workplace environment, and providing confidence.

This licensing structure aligns with three categories of work practice (DELWP, 2020). These being,

1. A licensed trade employee. This allows the individual to only work for an employer and not be self-employed such as a sub-contractor.
2. A Registered Building Practitioner, Limited (Contractor), with authority to undertake work < $10,000. This allows the individual to undertake subcontract work for a registered builder, or a private client up to the value of $10,000. There is no requirement for consumer protection insurance.
3. A Registered Building Practitioner, Unlimited (Builder), with Insurance and authority to undertake work > $10,000. This allows the individual to undertake works as a sub-contractor or undertake work for a private client with no limit on the value. There is however the need for probity and consumer protection insurance.

In addressing the need for the low/non-qualified construction worker to undertake RPL and continuing education, the concepts presented follow the similar tiered model of licensing.

This allows flexibility in the RPL practice and career progression from initial licensing through to the Registered Building Practitioner classifications in this research informed RPL design (Pokorny et al., 2017).

Phase one, Licensed Construction Trade

This model aims to validate the candidates' skills and knowledge at the most basic requirement. As the classification of this licence is at the lowest level of the tiered concept, being people employed as construction trade workers, this does not include sub-contractual roles, therefore, there exists a confidence that this cohort works under the supervision of an employer. Due to this factor, it is proposed to utilise an alternative credential, an industry certification of the candidates' skills and knowledge in a workplace environment where the candidate has little autonomy.

The use of an equivalent, alternative credential may remove some of the pressures related with an RPL activity against the national Certificate III qualification

competency standards and performance criterions. This compliance and regulations process is documented in the literature as laborious, prohibitive, and complex (Souto-Otero, 2016), (McLaughlin & Mills, 2012), (Bennett, Southgate, & Shah, 2016), and thereby promoting what Pokorny et al. (2017) term as a "monological approach" where the assessors process was parallel to the academic compliance, leaving the candidates disempowered.

In an alternative credentialed environment, a wholistic approach could be utilised, with one simulated industry project covering the entire alternative credential. Providing this alternative allows the assessor greater flexibility in assessment activity design and the assessment judgements used, resulting in the promotion of a dialogic and mediatory process where the candidate and the assessor have equality of power in identifying equivalence of knowledge and the competency outcomes or certification requirements (Pokorny et al., 2017).

The Australian Qualifications Framework (2013) presents the application of knowledge and skills at a certificate III trade qualification level as applicable in known and stable contexts. As the candidate is deemed to have limited authority regarding their work role, this conceptual model is weighted on the practical component of the qualification.

Applying a focus on the practical element of the qualification aligns with the everyday work environment of the candidate providing contextuality and familiarity for the candidate. The familiarity of these industry authentic practical activities and assessments may reduce some of the candidate stressors such as fear and anxiety that have been indicated in this research.

A preparatory process is designed considerate of the findings in this research with plain language utilised, understanding of candidate identity, creating care, and inclusivity. This process has been utilised with success in Glenys Ker's (2017) Capable NZ research regarding consideration of indigenous and ethnic cultures and their implementation of "acknowledging Māori" and may align with the construction industry subculture of the low/non-qualified worker.

The implementation of a "Learning and Practice Hub", an assessment free environment allowing the candidate to learn what is expected of them, to practice the skills required for practical assessment and be fully prepared for the formalities of the assessment activity. This hub is group based, where discussions take place and self-validation of knowledge takes place. This element is planned to be two days duration and brings the learning environment into the RPL environment, embedding the same principles of learning and learning in a social environment, the social distribution of cognition (Michaelian and Sutton, 2013), into the RPL practice.

The assessment activity is a singular project covering the entire alternative credential and becomes a pathway to the national certificate III trade qualification. The practical examination can be designed to be chronologically short being just one day. This phase provides efficiency and therefore reduces the cost to the candidate. The RPL candidate can choose to undertake the assessment either individually or in a small group environment. This opportunity to employ candidate assessment preference, is resultant from the research findings that found a greater candidate success rate in group assessment activities but is considerate of the findings in Deller (2020), that showed some candidates withdrawing from the group RPL process due

to the fear of not performing as well as others, and in particular, others they know and supervise in the workplace.

The candidate that does not achieve the outcomes of this phase one assessment can revisit the phase one process or undertake further training and practice over a long chronological timeframe, in preparation for re-attempting the formal assessment activity. This would require changes to the current funding arrangements as the personal cost to the candidate may become prohibitive.

Phase two, Registered Practitioner Sub-Contractor (limited).

Phase two builds on the candidate outcomes and experiences in phase one and introduces RPL of the nationally accredited certificate III trade qualification. This introduction of the nationally recognised trade qualification is to meet the requirements of the Victorian Building Authority (VBA) registration as a Registered Building Practitioner, Limited (Contractor), and allows the successful candidate to undertake subcontract work for a Registered Builder or private client up to the value of $10,000 dollars.

The application of phase one as commonality of process, an entry into the RPL for low/non-qualified construction workers system, not only creates an engagement opportunity in encouraging this cohort to re-enter education but becomes a vehicle for the assessor to gain an understanding about the candidate, both technically and personally, allowing the creation of a partnership between the candidate and the assessor in designing the individual pathway to the outcomes of phase two.

The stage one assessment forms a credit into the stage two formal certificate III qualification. Depending on the area of industry the candidate works i.e., domestic construction, commercial construction, concreting, or joinery. The remaining program can be tailored to suit, by aligning the elective competencies to the identified stream, or area of the candidates work. This will allow greater RPL of the work activities in lieu of training and assessment, or gap training, for these competencies.

In this phase, group and individual practical activities occur, these activities aligning with the findings in the research that assessments should mirror the workplace activity. These findings presented that hanging a door in industry is an individual task, so the RPL practical assessment could be individual. Parallel to this, the task of setting out a structure to be built, requires a team of people, at a minimum two people. The practical assessment of this task would occur in the same manner, via group assessment. The continued inclusion of group discussions and maintenance of the social environment providing support for the candidate.

The knowledge assessments will continue to be multiple choice with the gradual introduction of essays and assignments, particularly as this phase will include competencies from the Certificate IV Building and Construction, a further requirement of the VBA. This due to the greater managerial and financial responsibility set at this level of practitioner registration.

Candidates that currently have a certificate III trade qualification will fast track from phase one, to the certificate IV element of phase 2. As some candidates may be working as existing subcontractors, the Certificate IV elements may be RPL'd with identified gap training occurring.

Phase three, Registered Practitioner (unlimited).

Successful candidates from phase 2, who are not currently registered with the VBA as a builder, can continue their development via the inclusion of Diploma of building units in this phase 3 as a further requirement of the VBA. This is particularly relevant if the candidate is managing works with a value over ten thousand dollars, although financial probity is also a requirement of this classification. The continuation of best RPL practices, as identified in this research, including group practices, supports the candidates in achieving the learning requirements of this phase.

There is no requirement for a candidate who is currently registered as a Builder with the VBA, to undertake this phase, however if they are not a qualified trade and personally carry out trade works, they would need to undertake stage 1 and 2 to gain a formal trade qualification to legally work as a trade, even if only part time.

Suggested Implementation

This researcher designed conceptual RPL program was informed by the research findings, including findings of Buddlemyer et al (2012), in utilising a certificate III qualification as a driver to improve social inclusion and influences the continued re-engagement with education.

Phase one, Licensed Construction Trade

This allows the individual to only work for an employer.
Entry to the program is limited to non/low qualified construction workers undertaking carpentry work. Applicants must provide evidence of 4 years minimum employment in this field.

This phase is designed to create an engaging environment for the low/non-qualified construction worker. Being considerate of the target cohort this phase can be seen as achievable, non-threatening, aligned to workplace activities, and utilises a non-educative vernacular.

- Commencing with an assessment free environment, allowing discussion, learning, and skills practice in a non-threatening group environment.
- Creating a dialogic model in a social environment in validating the candidates' knowledge at a basic requirement.
- Implementing multiple choice knowledge assessments.

- Utilising practical assessments, mapped to an “alternative credential” in validating skills to reduce the compliance and regulatory environment associated with a national qualification.
- Phase one is seen as a transitional phase to the formality of a national qualification and practitioner registration requirement in phase two.

This phase, at its most basic premise, may create an engaging pathway for the identified cohort to gain certification and licensing, allowing the continuation of work and employment, without which, may exacerbate social exclusion. The fear of losing employment is identified as a key risk factor leading to suicide in the construction industry (Inoue, et al 2007), (Heller, et al, 2007), (Yur’yev et al, 2011).

Facilitation Guide.

Day one. Non assessed activities (learning Hub).

- Introduce the group to the RPL process, leading conversation, building confidence, and encouraging participation.
- Lead conversation regarding building practices, draw out candidate experiences.
- Lead conversations aligned to a pre-determined set of topics.
- Provide candidates with instructional plans of the assessment activity and allow them to view a full size completed assessment example.
- Lead group discussion regarding construction processes and safe working methods.
- Provide candidates with a simple set of multiple-choice knowledge questions (the pre-determined discussion topics) to provide the best chance of success for the candidates and create encouragement to continue.

Day two. Non assessed activities (learning Hub).

- Revisit the instructional plans and explain the assessment activity inviting group discussion.
- Conduct a review, discussion, and demonstration, regarding the safe use of tools and equipment.
- Allow the candidates to form groups of approximately 4 participants discussing planning and preparation of construction, tools requirements, material quantities estimation, and include multiple-choice knowledge questions.
- Provide an opportunity for the candidates to practice the skills required for the assessment activity in a small group environment.
- Candidates construct the assessment project as a group activity.
- Provide feedback to the groups.
- Provide individual feedback.

Day three. Assessment activity.

- Introduce the assessment activity to the candidates, revise and reinforce the previous activities.
- Explain the stages and timing of the assessment activity.
- Each individual candidate to undertake staged multiple-choice, basic knowledge assessments aligned to the project.
- Each Candidate to create a safe working methods statement (template provided).
- Individual candidate or small group (candidate decision) to construct the assessment project with critical feedback at stages of construction.
- Demolition of the constructed projects can occur individually or as a team.
- Provide feedback to the group of candidates regarding appointments to provide individual results and feedback, and to provide information regarding the next phase if candidates wish to continue.

Phase two, Registered Practitioner (limited).

This allows the individual to undertake subcontract work for a registered builder, or a private client up to the value of $10,000. This phase scaffolds from the previous phase, building on the confidence of the candidate and implementing increased rigour. This phase integrates the nationally recognised certificate III trade qualification and undertakes limited elements of certificate IV, enabling successful candidates to apply for practitioner registration.

- Pathways the achievements of stage one into the formal, nationally accredited certificate III trade qualification and maintains a social environment with individual and group practical assessment activities together with RPL evidence in achieving the remainder of the certificate III.
- The integration of certificate IV competency units in the learning and assessments. This can be achieved by integrating these units into the certificate III units and extending the delivery and assessments. Remaining in the familiarity of the practical certificate III environment can reduce the fear and provide confidence for the candidates.
- The gradual inclusion of an educational vernacular, in preparing the candidates for phase three, and further education.
- The commencement of a portfolio.

This program may present a chronological timeframe of up to 4 years, dependant on candidate prior knowledge and skills.

Phase three, Registered Practitioner (unlimited).

This allows the individual to undertake works for a registered builder, or a private client with no limit on the value. There is however the need for probity and consumer protection insurance.

- Continues candidate development via the continuation of this conceptual model with a mix of group assessments and individual assessments, with the inclusion of Diploma of building units in meeting the educational requirement of the VBA Builder registration.
- Presentation of a portfolio
- Provide a grounding for continued higher education.

This conceptual 3 phase model provides exit points dependant on candidate abilities, current working situation, and career aspirations, while being cognisant of the varied individuals that make up the construction industry.

Further refinements to this model are in the process of being developed such as the mapping of Certificate IV competency units into the Certificate III trade qualification. This will create a series of common activities that provide either full or partial assessment of both the Certificate III and Certificate IV qualifications and create a strong link with the workplace, or simulated workplace activities being recognised at multiple qualification levels.