Towards an alternative approach to policy design to empower Indigenous Australians in the upcoming green economy: a cross-cultural service design-thinking framework

Thesis submitted in fulfilment of the requirements of the degree of Doctor of Philosophy

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Abstract

The purpose of this thesis was to investigate how best to empower Indigenous Australians in the upcoming employment and business opportunities of a low-carbon (‘green’) economy, particularly in Australia’s rural-urban terrains. It was attached to an Australian Research Council (ARC) Linkage Project, titled ‘Indigenous Participation in a Low-Carbon Economy’. My role as a Ph.D. student was to analyse the work on the project from a comparative perspective in relation to other approaches and methods used in engaging Indigenous communities in training programs and services to facilitate entry into new economies. It utilised five research modules: desktop research analysis (critical discourse analysis); an exploratory student survey; semi-structured interviews; a participatory workshop; and a deliberative democratic forum.

This Ph.D. research project sought to make progress towards theorising a new approach to policy design and implementation that generates democratic and innovative outcomes in complex socioeconomic, cultural and political environments, such as those found in Indigenous Affairs. It sought to make significant steps forward in building a theoretical design foundation from which to empower marginalised ‘end-users’ to participate in the design and implementation of policies, programs and services. The project identified and reworked key theoretical design components from service design thinking to help bridge the conceptual and methodological divide between policy and praxis, with particular focus on enabling Indigenous Australians and communities to become stronger agents in their own agenda for change. The project’s most fundamental discovery is that a human-centred and service design thinking framework that enables self-organising, transversal, heterarchical and Indigenised (decolonised) design practices is necessary to empower Indigenous Australians to design and implement a green jobs training program and thus direct their own projects in the upcoming green economy.
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Declaration

I, Paul Fiocco, declare that this Ph.D. thesis, entitled, *Towards an alternative approach to policy design to empower Indigenous Australians in the upcoming green economy: a cross-cultural service design-thinking framework*, is no more than 100,000 words in length including quotes and exclusive of figures, appendices, bibliography and references. 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.

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1. *Design Anthropology as a new field of theory and praxis*
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2. *Review of waste management service design for health and wellbeing in rural and remote Aboriginal and Torres Strait Islander communities*
   Design4Health 2017 Conference, Melbourne 4-7 December 2017
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   2016-2017
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1. **Project introduction**

This Ph.D. research project is attached to an Australian Research Council (ARC) Linkage Project, entitled, ‘Indigenous Participation in a Low-Carbon Economy’ (LP120200712). The Linkage Project is a joint initiative between the South Metropolitan Youth Link (SMYL) Community Services in Perth, Western Australia (WA); the Curtin University Sustainability Policy (CUSP) Institute in Perth, WA; and the Centre for Design Innovation (CDI) at Swinburne University of Technology in Melbourne, Victoria. The aim of the ARC-funded research project is to investigate how best to include Aboriginal and Torres Strait Islander peoples (hereafter Indigenous Australians) in the new employment and business opportunities of an upcoming low-carbon (‘green’) economy, particularly in Australia’s rural-urban interface. My role as a Ph.D. student was to work in close guidance from the ARC-funded project and analyse the work on the project from a comparative perspective in relation to other approaches and methods used in engaging Indigenous communities and other disadvantaged people in education and training (employment) programs and services.

SMYL Community Services was established in 1984 and is now one of the largest community-based charity organisations in WA. Its focus is on delivering a range of labour market programs and services to disadvantaged Western Australians, particularly underprivileged and marginalised youth, which includes students who drop out of high school in years 10, 11 and 12, as well as other young people who need to transition into employment. A large percentage (roughly 75%) of these young people are from Aboriginal and Torres Strait Islander backgrounds. The organisation’s vision and community role is oriented toward achieving a just and sustainable society by providing appropriate social services, education, employment and training to those most in need.

As the principal industry partner in the ARC Linkage Project, SMYL was primarily concerned with the following three research objectives:
1) Identifying what sort of jobs and opportunities might become available to young Indigenous Australians as the Australian economy shifts toward a low-carbon economy and the demand for ‘green’ skills increases;

2) Identifying future labour demand and employment training trends in order for the organisation to remain innovative and strategic in its forward planning around Indigenous Australian employment; and

3) Identifying how best to design strategies and pathways for educational training that can give innovative choices to young Indigenous Australians and industry in the emerging green economy.

Given SMYL’s research objectives, the ARC Linkage Project can be summarised thus: Australia’s transition towards a low-carbon economy will cause changes in skill requirements and raises the need to maximise Aboriginal participation. This innovative project will provide a better understanding of what is required for this to occur and showcase a new way of developing educational and training strategies for Indigenous engagement in the upcoming low-carbon economy.

SMYL identified the need to maximise Indigenous participation in the upcoming green economy as emerging evidence in the literature suggested that green jobs can provide Indigenous peoples with culturally appropriate and rewarding forms of ‘mainstream’ economic engagement (Green Skills Network [GSN], 2012; Aboriginal Human Resource Council [AHRC], 2010). SMYL exhibited considerable concern because a large part of their efforts were put into educating and training Indigenous youth for ‘blue-collar’ jobs, which were culturally inappropriate and unrewarding; these jobs do not equip young Indigenous people for a future outside of the unskilled labour market, which for SMYL was an approach to labour market program design that was causing significant cultural dislocation and dysfunction among Indigenous communities.

In response to SMYL’s concerns, the ARC project developed three general research objectives:
1) Profile the range of future skill required in Australia’s emergent low-carbon economy;

2) Analyse what the future skilling requirements are against the current training and skilling of Indigenous Australian youth; and

3) Analyse the education and training development services and programs provided to marginalised Indigenous people and identify the approaches used previously amongst Indigenous communities that had been culturally appropriate and effective or ineffective and why.

The ARC project planned to showcase a new way of developing education and training approaches for Indigenous engagement in the green economy because growing evidence in the literature showed that mainstream approaches to education, training and skilling in Australia have so far failed to respond appropriately to Indigenous social and cultural needs. Australia’s Western education and labour market systems continue to exclude Indigenous knowledges, practices, perspectives and values, thus making them blind to the cultural needs of Indigenous Australians (see Beckford, Jacobs, Williams & Nahdee, 2010). International research showed that the sharp divide between Aboriginal knowledge and Western scientific knowledge has not only marginalised Aboriginal wisdom but also made the Western knowledge and learning system unattractive and unsuited for Aboriginals (see Agrawal, 1995; Briggs, 2005). This is problematic given national and international research found that integrating (and legitimising) Indigenous knowledges, practices, perspectives and values (i.e. Indigenous approaches to education) into the design and implementation of Indigenous programs and services has been a critical success factor not only for increasing Indigenous participation in education and training (and successful employment outcomes) but also for making real improvements in Indigenous peoples’ health and wellbeing (see Seemann, 2009; Cole, 2002; Hall, Sefa Deo, Rosenberg, 2000; Tebtebba Foundation, 2008;
Problems concerning the ineffectiveness of mainstream approaches to designing Indigenous-focused (in this case, employment) programs and services have been identified to extend beyond the education and training sector (the ‘local level’) to the level of policy. Research indicated that the government’s overarching policy frameworks which are ‘driving’ the design and implementation process have created an environment that is not conducive to effective (culturally appropriate) design practices and outcomes, in the ultimate sense of engaging Indigenous Australians in the mainstream economy in a way that meets Indigenous cultural needs. Evidence revealed that the exclusion of Indigenous cultural concerns from the education and training sector stems in large part from the exclusion of Indigenous Australians from the policy design process. Research indicated that it is vital to engage Indigenous Australians not only in the development of training and educational programs and services, but also in the design of policy itself, the complex details of which, if adequately theorised, have proven essential to facilitate successful program and service outcomes in Indigenous Affairs (see Moran, 2016). In short, to integrate Indigenous cultural knowledges, perspectives and practices into the training and educational system, Indigenous Australians need to be appropriately included in the policy, program and service design process.

At the heart of the ARC-funded research project is therefore the question of how best to facilitate Indigenous participation or ‘engage’ Indigenous Australians in the process of designing and implementing Indigenous-focused policy and its subsequent (education and training) programs and services. As a result of the above concerns, two research objectives were added to the ARC project:

1) Identify ways of delivering education and training to Indigenous communities that depart from the mainstream approaches that have proven inadequate to Indigenous cultural needs; and

2) Identify the cultural specifics and needs of Indigenous Australians to develop culturally appropriate skilling approaches, policies and strategies.
In response to the above, two ARC project outcomes were identified:

1) Develop participation approaches and strategies that will facilitate the participation of Indigenous people for the growing labour market and business opportunities in low-carbon technologies, with particular regard for the cultural context and strengths of Indigenous people and communities; and

2) Develop an Indigenised participatory research and design methodology for developing educational, training and related policies that achieve the best effects in complex social, cultural and economic situations.

The research and design methodology needs to be Indigenised (or ‘decolonised’) because evidence strongly suggested that power relations between Indigenous—non-Indigenous Australians need to be equalised (Indigenous Australians have little to no influence over the decisions or decision-making structures and processes that affect them most) if successful program and service outcomes for Indigenous Australians are to ensue (see Hunt, 2013). It is for this reason that the ARC project stated that research so far in the Indigenous Affairs literature has not provided successful approaches to empower Indigenous Australians ‘to enter new economies’. To enter the emerging green economy, an approach that sufficiently empowers Indigenous Australians in the policy, program and service design process is fundamental.
1.1 Limitations of existing theoretical design frameworks

Facilitating Indigenous entry into the ‘brown’ economy—the non-renewable resources industry (principally mining sector)—in WA (previously one of the State’s largest employment generators) largely failed to mitigate Indigenous economic disadvantage. Research by Dockery (2014), at the Centre for Labour Market Research at Curtin University of Technology, confirmed that Indigenous WA residents in 2011 (at the height of the ‘mining boom’) were “four times more likely to be unemployed than non-Indigenous persons, rather than three times more likely as was the case in 1991 [during a period of economic recession in WA]” (Dockery, 2014, p. 80). As a result, Dockery (2014) concluded that “it is hard to believe the resource industry, as a whole, has made a concerted effort to accommodate Indigenous people in meeting their labour demands, or in extending opportunities created by the mining boom to local Indigenous populations” (Dockery, 2014, p. 86). Primary data confirmed that the mining sector had done little to provide Indigenous job seekers with sustainable economic options; the jobs generated in the resource industry were largely intermittent and comprised of unskilled manual labour. Further, the mining sector had difficulty accommodating Indigenous cultural needs and concerns (i.e. socio-cultural obligations to care for land); and the sector almost entirely excluded Indigenous women from seeking employment.

As evidence in the present Ph.D. research project shows, the design strategies and approaches used by the resource sector are largely the same as those used by the Australian government to design and implement Indigenous-specific policies, programs and services; the resource sector adopts a ‘top-down’, ‘mainstreaming’ approach (which we see constitutes a form of cultural assimilationism) to developing traineeships, apprenticeships and employment programs that ultimately exclude Indigenous Australians from decision-making structures and processes, the result of which undermines any chance of seriously integrating Indigenous social, cultural and development needs into programs, services and outcomes (Boughton, 1998, p. 29). Evidence in the literature (which is corroborated by the primary data) revealed that “top-down decision-making by the mining industry serves its own interests while subordinating [Indigenous] community needs, reproduces power imbalances, maintains the status quo and stifles inclusive and productive debate” (Brueckner, Durey, Mayes & Pforr, 2013, p. 283)—all which are crucial design factors and processes that need to be questioned.
and reconceptualised if Indigenous Australians are to have a chance at participating in the green economy. Further, by instantiating a form of development that prioritises economic factors at the expense of Indigenous community, social, cultural and environmental needs, many Indigenous Australians claim that mining “fails to qualify as sustainable development” (Brueckner, Durey, Mayes & Pforr, 2013, p. 9; Scott & Durey, 2014, p. 259).

In light of the above, this Ph.D project seeks to point out that the mainstream approach used by governments and industry to (attempt to) facilitate Indigenous entry into the resource industry should not be used for the upcoming green (renewable energy) economy, as this is very likely to further exclude and marginalise Indigenous Australians from the emerging labour market and business opportunities of a green economy. Hence, as identified by the ARC Linkage Project, there exists an urgent need to develop an alternative approach to policy and labour market program design and implementation to facilitate Indigenous entry into the green economy, in a way that proves adequate to Indigenous cultural needs.

An alternative approach to the one used by governments, industry, education and training systems to facilitate Indigenous participation in the mainstream labour market has been developed by social scientist, anthropologist and economist Jon Altman, at the Centre for Aboriginal Economic Policy Research (CAEPR) at The Australian National University (ANU). Entitled the ‘hybrid economy model’, Altman’s Indigenous-specific development framework aims to legitimise the ‘customary’ sector of the economy and integrate it with the traditional “two sector conceptualisation of the economy (market/private and state/public)” (Russell, 2011, p. 1). As a third economic sector, the customary sector seeks to recognise non-monetised activities that have been traditionally exercised by Indigenous Australians in (typically rural and remote) Australia, that are both productive and life-sustaining and thus “reaffirm dynamic Indigenous connections to country and ways of being” (Russell, 2011, p. 1). Altman’s economic model has done a great deal to support sustainable economic activities proven to “enhance Indigenous wellbeing” (Altman, 2006, p. 10, cited in Maddison, 2009, p. 72; see Green & Minchin, 2014), and has been operationalised in outer regional, remote and very remote Australia to generate “a more sympathetic response from the Australian state [to] see value in Aboriginal contributions and ways of being” (Altman, 2010, p. 263).

However, research in the literature pointed out that the application of Altman’s hybrid economic model has been limited to areas in Australia where Indigenous Australians can
expand their economic base by drawing on traditional practices, areas principally in rural, remote and very remote Australia (Green & Minchin, 2012, p. 642; Martin, 2003). In contrast, the ARC Linkage Project (and by extension the present Ph.D. research project) focused on two geographical areas in Australia which have been relatively neglected in the Indigenous Affairs literature: the rural-urban interface and inner regional environments. As Hunt (2014) discovered, Indigenous Australians “have not featured strongly in the literature or policies relating to regional development; nor has regional, rather than remote, development been a strong theme in the literature on Indigenous Australia” (Hunt, 2015, p. 115). Similarly, Maddison (2009), drawing on the work of Eualeyai–Kamilaroi academic and writer, Larissa Behrendt, pointed out that “[m]uch of the debate about economic development for Aboriginal people remains focused on the extreme poverty of some remote communities. However, … development is needed in urban areas as well, where Aboriginal people still find themselves excluded from the ‘mainstream’ of economic life” (Maddison, 2009, p. 66). Clark, de Costa and Maddison (2016), in reference to Altman’s alternative framework, concluded that “land and hybrid economies may offer little for urban Indigenous peoples” (Clark, de Costa & Maddison, 2016, p. 9). This is significant, as roughly 53% of Indigenous Australians live in urban, peri-urban and inner regional areas (approximately 241,164 people) (ABS, 2007).

The literature pointed out that alternative development frameworks in Indigenous Affairs have not been designed and operationalised in urban fringes or inner regional Australia, despite emerging evidence indicating that these two terrains not only support the design of sustainable, place-based economies that are “sympathetic with nature” (Ghosh, 2014, p. 143) but support cultural and community development and control.

1.2 ‘Green jobs’ and project hypothesis

Underpinning the ARC Linkage Project is an assumption that the ‘upcoming’ employment and business opportunities of a green economy (and its subsequent education and training programs) have the potential to successfully integrate Indigenous knowledges, practices and values and thus provide Indigenous Australians with culturally appropriate forms of economic engagement (in outer urban and inner regional areas). It is essential that
this assumption is interrogated insofar as theorisation in both the national and international literature around what exactly constitutes a ‘green’ (low-, zero- or negative-carbon) economy and its subsequent ‘green jobs’ continues to be “hotly debated” (Parrish & Foxon, 2009, p. 50; see Anderberg, 2008; Dierdoff, Norton, Drewes, Kroustalis, Rivkin & Lewis, 2009). In a comprehensive report by the Nordic Council of Ministers (2012), entitled, ‘Measuring green jobs? An evaluation of definitions and statistics for green activities’, it was concluded that “[t]here are no principal unambiguous criteria for distinguishing between ‘green’ and ‘non-green’ jobs, technologies and activities, and consequently, there is no commonly agreed definition across the different initiatives made to measure the green factors. Hence, there is a need to clarify and structure relevant concepts . . .” (Nordic Council of Ministers [NCM], 2012, p. 15). Goods (2014) similarly concluded that “[t]here is no accepted definition of what constitutes a green job, nor is there any standard measure for evaluating claims of ‘greenness’” (Goods, 2014, p. 9). As a result, Goods reached the following crucial insight:

Confusion around what constitutes green jobs and how they may be defined at the political level is clearly problematic for the development of effective public policy that creates or supports green jobs. This leads to the question as to how comprehensive policies can be proposed, developed and implemented if there is no accepted understanding of what a green job is or what these jobs aim to do. Indeed, this lack of consensus and shallow engagement limits the development of effective policies and contributes to the “greenwashing” of environmentally destructive jobs. (Goods, 2014, p. 53)

The green economy is commonly understood in the literature to refer to a socio-economic order that is “low carbon, resource efficient and socially inclusive” (United Nations Environment Programme [UNEP], 2014, p. 14). For what the green economy seeks to achieve, it “should contribute to eradicating poverty as well as sustained economic growth, enhancing social inclusion, improving human welfare and creating opportunities for employment and decent work for all, while maintaining the healthy functioning of the Earth’s ecosystems” (United Nations Conference on Sustainable Development [UNCSD], 2012, p. 14). Put differently, the green economy requires “[a]n [economy-wide] energy transition to a clean, renewables–based, low–carbon system that meets essential social and environmental priorities . . .” (The Cornell Global Labor Institute [CGLI], 2013, p. 1). In an outcome
document of the United Nations Conference on Sustainable Development, entitled, ‘The Future We Want’ (2012), it was further stated that the green economy needs to “[e]nhance the welfare of indigenous peoples and their communities, other local and traditional communities and ethnic minorities, recognising and supporting their identity, culture and interests, and avoid endangering their cultural heritage, practices and traditional knowledge . . .” (UNCSD, 2012, p. 14).

It follows that the upcoming green economy (and its subsequent employment and business opportunities) need to be appropriately theorised to prove adequate to Indigenous cultural and development needs. To enable comprehensive (employment) policies, programs and services to be designed and implemented it is first necessary to define what constitutes ‘green economic activity’ and how this activity can meet Indigenous cultural needs and enhance Indigenous peoples’ health and wellbeing. A large amount of the literature revealed significant concern regarding the possibility of the upcoming green economy being coopted (‘greenwashed’) by the present unsustainable model of socioeconomic development, a political move that researchers argued will likely further marginalise Indigenous peoples and do little to address climate change (see Kenis & Lievans, 2015).

In light of the above, the hypothesis of the present Ph.D. research project is thus: if 1) green jobs (and the economic development model in which they are embedded) are appropriately theorised to prove adequate to Indigenous cultural and development needs; and 2) the right policy, program and service design framework is developed to facilitate genuine Indigenous participation and collaboration in all design outcomes; then 3) Indigenous participation in the green (low-carbon) economy has the potential to significantly expand the economic base of Indigenous Australians living in peri-urban and inner regional areas.

Put differently: if 1) the notion of Indigenous cultural development is embedded within an appropriately theorised green economic policy context; and 2) an Indigenised participatory research and design methodology for developing educational, training and related policies is appropriately conceptualised and operationalised; then 3) the potential for governments (‘Indigenous Affairs’) and organisations such as SMYL to respond to Indigenous cultural and economic needs will significantly increase, particularly within Australia’s rural-urban and inner regional environments. From a design perspective, the thesis’ main proposal is that if the design framework developed herein is operationalised in the real world then it will significantly contribute toward empowering Indigenous Australians.
in the process that affects them most: the design of Indigenous policies, programs and services.

1.3 Problematic assumptions and the need for an alternative design framework

The empirical evidence that suggests green jobs can provide culturally appropriate jobs to Indigenous peoples (in outer urban and inner regional areas) stems largely from international sources, principally American and Canadian literature, in which the focus is exclusively on the renewable energy sector. In one report, entitled, ‘Emerging Green Jobs in Canada: Insights for Employment Counsellors into the Changing Labour Market and its Potential for Entry-Level Employment’, it was concluded that “[t]he renewable energy and energy conservation sectors offer enormous opportunity for Aboriginal communities to be particularly influential [because the] environmental sustainability principles of the green economy are already an integral part of Aboriginal [First Nations, Métis and Inuit] culture” (GSN, 2012, p. 21). In another paper, entitled, ‘Green Energy Outlook: Generating Opportunities for Aboriginal Communities’, it was argued that green jobs can become “a source of pride and identity [for Aboriginal peoples, as today’s society is] at a time when foundational Indigenous teachings are not treated as ‘primitive’ notions but as ‘futuristic’ thinking” (AHRC, 2010, p. 2-4).

However, how such teachings and philosophies can be integrated into the employment programs and services depends on the design framework used. More broadly, research indicated that policy makers and design practitioners run the risk of undermining (or at least marginalising) Indigenous cultural needs by assuming that they can be met within the theoretical confines of the green economy and its ‘environmental sustainability principles’ (Arabena, 2006). It is important to emphasise that the main reason for generating employment and business opportunities (green or otherwise) for Indigenous Australians is to make significant and meaningful improvements to Indigenous Australians’ health and wellbeing, but researchers (especially non-Indigenous researchers) cannot assume that jobs in the upcoming renewable energy sector will simply translate into culturally rewarding forms of economic activity that enhance Indigenous Australian health and wellbeing. The reason why this assumption is problematic is because the main framework(s) used to design and
implement Indigenous-focused (employment) policies, programs and services have so far failed to appropriately integrate Indigenous-specific determinants of health and wellbeing (which derive from specific Indigenous cultural principles). The dominant framework used in Indigenous Affairs to improve Indigenous health and wellbeing has been premised on non-Indigenous notions of health and wellbeing. As Manning, Ambrey and Fleming (2015) at CAEPR concluded, “[t]he use of a non-Indigenous perspective of wellbeing in the design and application of Indigenous policy is fundamentally flawed, as it does not account for Indigenous ways of life” (2015, p. 17). Biddle (2011) also concluded, in a research paper, entitled, ‘Measuring and analysing Indigenous wellbeing’, that “the design of Indigenous policy needs to take into account the available evidence on [Indigenous] wellbeing, rather than making assumptions about its determinants” (Biddle, 2011, pp. 18-19).

Approaches used to design and implement Indigenous policy have made the assumption that Indigenous health and wellbeing is reducible to mainstream socioeconomic variables—a framework that focuses on level of employment, income, education (as measured by formal assessment of performance indicators, e.g. attendance rates, grade progression, completion rates, literacy and numeracy levels) and health (as measured by physical health and life expectancy). However, research indicated that this framework fails to capture (and thus improve) Indigenous notions of health and wellbeing. It is for this reason that empirical research showed that for Indigenous Australians, participating in economic activity that does not contribute to Indigenous social, cultural, emotional (psychological) and spiritual health and wellbeing has a higher impact on Indigenous health and wellbeing than being in unemployment (see Biddle, 2011). Hence the ARC project’s research objective to identify the cultural specifics and needs of Indigenous Australians to develop culturally appropriate skilling approaches, policies, and strategies is fundamental.

Further evidence in the literature and primary data indicated that the lack of Indigenous participation in the mainstream labour market can be attributed in large part to the lack of culturally relevant forms of employment opportunities on offer in the mainstream education and training sector. In this sense, it is “the mainstream [that] is defined as ‘the problem’, and indigenous peoples’ non-participation [in education, training and labour market systems] taken as a measure of the system’s lack of relevance to the development needs and aspirations of their communities” (Boughton, 1998, p. 7, emphasis added). The aim of Indigenous employment policy should not be to achieve the same rates of employment and
income between Indigenous and non-Indigenous Australians by simply supporting the former to acquire the “same ‘skills’ or ‘qualifications’ profile as exists in non-Aboriginal society” (Boughton, 1998, p. 14), but rather to embed Indigenous (employment) policy in alternative design frameworks that work to support and maintain Indigenous notions of health and wellbeing by developing culturally appropriate forms of economic activity (including skills and qualifications). What motivates many Indigenous Australians to learn and seek employment derives fundamentally from their need to support and maintain Indigenous values (connections to culture), which the mainstream education and training sector largely fails to satisfy.

The fundamental point (which this thesis seeks to defend) is that theorising and developing green economic activity that affirms and maintains Indigenous notions of health and wellbeing (Indigenous development needs and aspirations) requires an alternative (policy, program and service) design framework that enables (empowers) Indigenous Australians to participate in the design process. As a result, the question of how best to ‘include’ Indigenous Australians in the employment and business opportunities of an upcoming green economy largely depends on the more fundamental question of how best to include Indigenous Australians in the policy, program, and service design process.

1.4 The need to examine the frameworks underlying Indigenous policy design

Given the Ph.D. student’s role in the ARC project is to offer a comparative approach to analysis, a large part of this thesis is dedicated to critically analysing the dominant approaches to policy, program, and service design used in Indigenous Affairs. Overall, evidence in the literature and primary data showed that the ‘working conditions’ in Indigenous Affairs have been significantly constrained by the theoretical framework underpinning the government’s design approaches, which thus far have been based on a theoretical framework that is fragmented, inflexible, culturally inappropriate, unequal, and non-participatory (premised on exclusion). Operating according to a ‘top-down’ (linear), external and centralised command and control system that promotes passive decision-making structures and processes,
Indigenous Affairs has largely undermined the capacity of Indigenous Australians to adequately participate in the design process, thus rendering them disempowered and unable to play an active part in shaping their own futures. As Calma pointed out, the government has designed “a passive system of policy development and service delivery . . . [and so the government cannot engage with Indigenous Australians] as partners and equal participants in creating a positive life vision” (Calma, 2006).

Engagement between governments and Indigenous Australians (or Indigenous policy, program and service recipients or users) has been stifled due to an inappropriately theorised design framework. Real-world movement between policy design (theory) and implementation (praxis) has been significantly hindered by a framework that evidence strongly suggested is conceptually and methodologically flawed. There exists a paucity of appropriate design mechanisms for facilitating thorough Indigenous engagement either before the policy design process begins or during the program and service implementation phase. Hence, despite evidence showing that Indigenous Australians need to (and want to) engage with governments in the design and implementation process, “the mechanisms for them to do so appear not to be ‘fit for purpose’” (Hunt, 2013, p. 20). It is for this reason that a large amount of evidence pointed out that the design framework in Indigenous Affairs needs to be reconceptualised to appropriately bridge the structural (conceptual and methodological) divide or disconnect between policy and practice (which is to say between policy designers and policy users), and that to do so requires the use of genuinely inclusive, participatory, and empathetic research and design methodologies to ensure Indigenous Australians “participate meaningfully [in Indigenous Affairs]” (Hunt, 2013, p. 6; see Nimegeer, Farmer, West & Currie, 2011; Henry, 2007; Phillips-Brown, Reddel & Gleeson, 2012). This framework needs to be meaningful in the sense that it incorporates Indigenous cultural values, needs and aspirations into every stage of the design process: from policy conceptualisation and development to the design and implementation of programs and services.
1.5 Positioning the project in ‘design studies’

Broadly speaking, the focus of the ARC (and by extension Ph.D.) research project has been on the “extraordinarily complex [relationship]” (Altman, 2004, p. 36) between Indigenous Australians and government, educators, industry, and community organisations concerned about facilitating Indigenous participation in the Australian economy. As a result, both projects have crossed multiple academic disciplines: policy research and design (social, economic and environmental), sustainability studies, design studies, Indigenous studies, critical pedagogy, and vocational education and training (VET) design. The discipline that the present Ph.D. research project has positioned itself in is called ‘design studies’ (also known as ‘design research’). More specifically, it positions itself in a subset of the field of design studies known as ‘social design’ and ‘service design’.

Design studies is an area of research that seeks to analyse and understand design thinking and practice (or design theory and praxis), including all conceptual and methodological processes used to design and implement human artifacts such as policy, programs, products and services; it is necessarily cross-disciplinary and systems-oriented. Social design is concerned fundamentally with analysing and understanding innovative design processes used to effect social change or to bring about positive impact “on more systemic levels in society” (Hillgren, Seravalli & Erikson, 2016, p. 90). Put differently, it seeks to produce social innovations in an attempt to “create new socio-economic value in society” (Stickdorn & Schneider, 2011, p. 30). Referring to the role of social design, Björgvinsson, Ehn and Hillgren (2010) argued that:

Social innovations can be products or services just like any innovation, but they can also be a principle, an idea, a piece of legislation, a social movement, an intervention, or some combination of them. The key aspect is its capacity to simultaneously meet social needs and create new social relations. (Björgvinsson et al., 2010, p. 43).

As a part of social design, service design focuses on analysing and understanding design processes and structures “aimed at providing a holistic service to the user” (Stickdorn & Schneider, 2011, p. 30). The term ‘service’ refers to a ‘service environment’ or arrangement
that supports citizens (‘service users’) to live a more sustainable and equitable life. It is a complex societal system such as transport, healthcare or governmental policy that seeks to ‘serve’ citizens by facilitating improvements in life outcomes (see Norman & Stappers, 2016). “In this perspective,” Björgvinsson et al. (2010) argued, “design is no longer just a tool for the development of functional innovative consumer products, but is increasingly seen as a process for radical change in developing services, systems, and environments, which support more sustainable lifestyles . . .” (Björgvinsson et al., 2010, p. 43). Service design has four main principles: inclusive, collaborative (‘co-creative’), empathetic (‘user-centred’), and holistic (or integrative) (see Stickdorn & Schneider, 2011).

This Ph.D. project argues that in the context of Indigenous Affairs, a framework that is based on human-centred and service-design thinking principles can contribute towards an appropriately theorised design framework that empowers Indigenous Australians in the policy design and implementation process. Service design thinking works by placing ‘users’ (in this case Indigenous Australians) and their values, needs and aspirations at the centre of the design framework; it seeks to transform unequal power relations by enabling users to “participate actively in the formation and definition of [a service design project]” (Ding Leong, 2003, p. 52). Instead of designing a system for users from a position external to them (as is the case with design frameworks in Indigenous Affairs), service design asks how design practitioners can make it possible for users to design their own systems (see Bødker, Ehn, Sjögren & Sundblad, 2000, p. 7).

Service design sees users as co-designers or co-creators so that the design outcome can be collectively owned by the participations themselves. This requires blurring the artificial boundaries between ‘experts’ (professional designers) and ‘non-experts’ (design users); the former “[need to] listen to and be guided by the voices of the Indigenous experts . . .” (Sherwood & Kendall, 2013, p. 89). Overcoming the segregation of roles implies ‘bridging the gap’ between ‘local’ (Indigenous) knowledge and ‘administrative’ (non-Indigenous) knowledge in a way that affirms Indigenous Australians as experts and co-creators in the design process. Emerging evidence suggested that if Indigenous Australians have control over the design process (by co-developing and co-owning the design process and outcomes) then it is seen by Indigenous Australians as legitimate or valid (see Hunt, 2013, p. 29). It is in this light that service design can contribute towards bridging the structural (conceptual and methodological) divide between policy and practice (between policy
designers and policy recipients) to enable Indigenous Australians “to become stronger agents in their own [agenda for change]” (Hunt, 2013, p. 31).

As for the theoretical components and characteristics that comprise the service design framework developed herein, the following list contrasts the framework’s principles with those used in the mainstream approach to Indigenous Affairs:

- Non-linear as opposed to linear;
- User-centred instead of exclusionary design practices;
- Decentralised as opposed to centralised;
- ‘Diagonal’ design approach to overcome the false dichotomy between ‘top-down’ (vertical) and ‘bottom-up’ (horizontal) approaches;
- Heterarchical (‘fishnet’) organisations as opposed to hierarchical (‘pyramidal’) organisations;
- Iterative learning approach instead of pre-framed rationality;
- Open and flexible (two-way feedback loops) instead of ‘closed logics’ and sclerotic;
- Maximising communication between government departments instead of ‘siloed’ departmental arrangements;
- Holistic instead of fragmented;
- Emergent instead of reductionist;
- Political instead of ‘neutral’; and
- Generative instead of predetermined.
1.6 Structuring ‘green jobs’

Based on the evidence discovered in the primary and secondary data, this Ph.D. project defends the claim that culturally appropriate green employment and businesses opportunities for Indigenous Australians living in rural-urban and inner regional terrains, are to be found in Indigenous owned and operated renewable energy (particularly solar energy) social enterprises. Put differently, the most promising form of sustainable economic activity that can 1) respond appropriately to Indigenous cultural needs and 2) increase chances for Indigenous (economic) self-determination, is to be found in solar energy social enterprises that are Indigenous owned and run. As described by Parrish and Foxon (2009), renewable energy (‘sustainability-driven’) entrepreneurship “employs private enterprise as a vehicle for contributing to environmental quality and social well-being, in addition to satisfying the entrepreneur’s own quality-of-life interests, with financial viability valued primarily as a means to achieving these ends” (2009, p. 55). Indigenous owned and operated renewable energy enterprises have the ability to generate financial value in a way that affirms and maintains Indigenous Australians’ quality-of-life (social and cultural interests). According to Brueckner, Pearson, Chatterjee, Wise and Marika (2011), “Indigenous entrepreneurship can usefully be understood in terms of pursuing economic opportunity for the purpose of diminishing Indigenous disadvantage through culturally viable and acceptable forms of wealth creation” (Brueckner et al., 2011, p. 1823).

Research showed that renewable energy generation and employment needs to be based on a decentralised model, as this creates more job opportunities for marginalised communities. As CGLI (2013) discovered, “[d]ecentralized [renewable energy] generation . . . is more conducive to local control, can create more jobs than utility-sized projects per million dollars invested, and can redefine the role and purpose of energy in a way that puts social and environmental needs before profit and accumulation” (CGLI, 2013, p. 45). In the context of Indigenous Affairs, CGLI’s last point is important, as evidence indicated that for many Indigenous Australians, wealth accumulation does not positively correlate with an increase in cultural health and wellbeing or in overall Indigenous life satisfaction (see Manning, Ambrey & Fleming, 2015). As stated by Brueckner et al. (2011), “wealth accumulation and private ownership are not necessarily seen by Indigenous people as sources of success or social status in the way they are framed by the dominant, non-Indigenous culture” (2011, p. 1823).
Indigenous owned and run solar energy social enterprise has the potential to provide Indigenous Australians with the chance to place Indigenous social and cultural needs before profit and accumulation.

Employment in Australia’s (and in particular Perth’s) solar power industry is expected to grow exponentially over the next few years as batteries for rooftop solar rapidly drop in price and solar power becomes a more cost-effective way to produce electricity than coal (even in the absence of renewable energy subsidies). Labour demand for the solar power industry is predicted to come from Australian households and businesses needing to transition away from the national grid’s ever-increasing electricity prices towards cheap, reliable and clean energy. As Chester (2013) pointed out:

There has been a rapid escalation in household electricity prices, primarily caused by substantial increases in regulated network charges for investment in peak capacity and asset replacement. In some Australian States, average household prices rose by more than one hundred percent during the 2007–2012 period, causing widespread poverty and deprivation for low-income households. (2013, p. 488)

Community owned and generated renewable energy enterprises may help overcome energy impoverishment, which is a significant form of social exclusion (see Chester, 2014).

A decentralised, community run and operated approach to renewable energy generation and employment, which aims to empower workers and communities while preserving local ecosystems, is what is known in the literature as an ‘equitable (democratic) transition to a green economy’ (see Parrish & Foxon, 2009). Furthermore, renewable energy entrepreneurship “has been positioned as a critical ingredient in the transition to a sustainable economy” (Parrish & Foxon, 2009, p. 49). Renewable energy entrepreneurship advances the fundamental socio-technical transition that society needs to undergo if climate change is to be mitigated. It is a shift in “socio-technical systems for meeting end-use demands for energy and other services” (Parrish & Foxon, 2009, p. 49).
1.7 Analytical approach to research

Of central importance to the ARC-funded and Ph.D. research projects is the notion of ‘engagement’—how to facilitate Indigenous participation, inclusion or engagement in Australia’s low-carbon economy. A large amount of evidence in the primary and secondary data pointed out that the issue of engaging Indigenous Australians and communities in Australia’s ‘mainstream (non-Indigenous) affairs’ should not be rendered *apolitical*. The notion of equal and respectful engagement, or participation that genuinely accommodates Indigenous cultural needs and aspirations, is an issue that is “inevitably political in the sense that it is about the exercise of power and the assertion of interests” (Hunt, 2013, p. 13). More precisely, and in light of the ARC project outcomes, an *Indigenised* approach to developing participation policies, approaches and strategies to engage Indigenous Australians in the upcoming green economy requires researchers and designers to grant ‘equal spacing’ to Indigenous and non-Indigenous perspectives, worldviews, cultural values and needs so that conflict and disagreement can be made *visible* and culturally appropriate decisions made. Equalising Indigenous—non-Indigenous power relations means providing Indigenous Australians with the “power to promote or veto decisions that are not culturally appropriate, credible or responsive to Indigenous peoples’ needs” (Robertson, Demosthenous, Dillon, Van Issum & Power, 2006, p. 135).

Following Altman (2010), Hunt (2013), Maddison (2009), Arabena (2006), and Grieves (2009), the government has implicitly theorised ‘Indigenous Affairs’ as a scientific or technical discourse (seemingly) free from political bias. Theoretically, the Australian government has made the positivist assumption of taking a ‘view from nowhere’, an epistemic position that constitutes a method of science or technique “built on a primarily deductive mode of knowledge building ... that privileges value neutrality and objectivity over subjectively derived knowledge” (Hesse-Biber, 2010, p. 14). The assumption of ‘value neutrality’ and ‘objectivity’ derives from the government’s claim that it is involved in developing apolitical (impartial) solutions to ‘socioeconomic disadvantage’ (see Department of Families, Housing, Community Services & Indigenous Affairs [FaHCSIA], 2009). In this sense, pursuing quantitative increases (‘objective’ improvements) in normative
socioeconomic and health variables for Indigenous Australians is seen as a ‘neutral’ approach. However, the standard socioeconomic indicators derive from a framework that represents the values of non-Indigenous Australia, a framework which reflects a Western worldview and way of life, and thus fails to affirm Indigenous notions of health and wellbeing and Indigenous cultural needs and aspirations.

This Ph.D. project argues that ‘Indigenous Affairs’ has been set up as a ‘post-political’ discourse which portrays social reality in neutralising or depoliticising terms (see Kenis & Lievens, 2015, p. 24); that is to say, the dominant socioeconomic order is seen as ‘natural’ and ‘inevitable’ and people’s desire to participate in it as self-evident, a logic similar to that which underpins cultural assimilationism (see Altman, 2010). Arabena (2006) highlighted this assumption, as well as the exploitative nature of society that primarily benefits non-Indigenous men and the non-inclusive definition of ‘civilised’, by arguing that “[t]he dominant society’s view is that [Indigenous] peoples should fit into, want and seek full participation in the ‘civilised’ activities of modern society, and aspire to an economy that normalises exploitative structures of society primarily advantageous to an androcentric model of benefit” (2006, p. 39). Arabena’s reference to an androcentric model of benefit indicates that Australia’s principal development model has had difficulty providing culturally sustainable economic options for Indigenous women, which is a claim that is corroborated by the primary data.

The point is that knowledge generated according to an alternative (Indigenous) framework is excluded in the policy, program and service design process. But evidence strongly suggested that the design framework needs to acknowledge and respect Indigenous ‘subjectivity’ and facilitate the emergence of subjectively-derived knowledge, which is knowledge that comes about through an alternative (Indigenous) set of values. To do so requires researchers and designers to conceptualise Indigenous Affairs as a deeply political discourse. This is necessary if the design approach is to set up working conditions that are truly democratic (conditions that are able to share and devolve power) (see Lefort, 1988; Mouffe, 2006). Indeed, it is only by acknowledging the process of (re)politicisation that “‘the political’ as a space of plurality is fully made visible, and a truly political, including strategic, reflection becomes possible” (Kenis & Lievens, 2015, p. 24).

In light of the above, this project adopted an approach to research based on critical discourse analysis. In this context, critical discourse analysis confronts and questions
hegemonic societal assumptions, behaviours, worldviews and values, especially as they relate to mainstream non-Indigenous Australia and how Indigenous worldviews and cultural needs have been marginalised in the policy design process. By revealing the cultural and political presuppositions behind the seemingly ‘rational’ decision-making and design processes used by governments to develop Indigenous policy (Fischer, 2003, p.14), critical discourse analysis constitutes “an exercise in analysing power and hidden ideologies ...” (Stephens, 2013, p. 22). Strategically, the approach seeks to challenge “positivism’s claims to objectivity and traditional knowledge building as the source of ‘truth’” (Hesse-Biber, 2010, p. 17) by embracing subjectively-derived knowledge (subjective realities) as a fundamental part of the construction of meaning and truth (Hesse-Biber, 2010).

At this point, it is important to state that the majority of Indigenous Australians, as identified in the literature and primary research, expressed their desire to take control of their economic development and thus operate in a framework that fundamentally listens and responds to their voices. However, this thesis does not assume that all peoples that identify as ‘Indigenous’ desire the same thing, but that the current design framework does not allow for difference to be appropriately acknowledged; using a category (‘Indigenous Australians’) to designate those that identify as ‘Indigenous’ does not mean that I am suppressing the particularity of speaking subjects but rather enabling difference to emerge.

1.8 Research methods and methodology

This project adopted a mixed methods approach to research and utilised five research modules: 1) desktop research analysis; 2) an exploratory student survey (closed questionnaire); 3) semi-structured interviews; 4) a participatory workshop, and 5) a deliberative democratic forum. The main research question this project sought to investigate was the following:

- What is required to appropriately facilitate Indigenous participation in Australia’s upcoming green economy?
Two subsidiary research questions were identified and investigated:

• a) *What are the critical success factors to assist in the redesign of policies, programs and services to enable Indigenous Australians to participate in the low-carbon economy?*

• b) *Given design frameworks used to develop and implement Indigenous policies, programs and services have had difficulty supporting Indigenous cultural and development needs, what critical theoretical design components are required to assist in the reconceptualisation of a design framework that can generate culturally appropriate outcomes, especially in relation to the business and employment opportunities of an upcoming green economy?*

This project prioritised the qualitative component of mixed methods research due to empirical evidence suggesting that privileging subjective experience over objectivity (and value neutrality) in projects that engage with oppressed social groups can allow researchers to gain access to (or generate) previously marginalised knowledge and insights (subjectively-derived knowledge) (Hesse-Biber, 2010). By privileging subjective experience, mixed methods allows for a “multilayered view of the social world . . . [which has proven to be] advantageous . . . as a means to get at subjugated knowledge—knowledge that has not usually been part of mainstream research inquiry” (Hesse-Biber, 2010, p. 9).

In this sense, research participants are seen as active, three-dimensional knowing subjects with personal views and values, rather than passive (speechless), two-dimensional subject-objects reduced to quantitative data. The Ph.D. project’s approach makes the assumption that “[Indigenous Australians] are the holders of expert knowledge about their lives and experiences . . . [and that they are] the experts on their needs” (Sherwood & Kendall, 2013, p. 92). The government’s standard (positivistic, quantitative analytical) approach to research in Indigenous Affairs operates according to a framework that fails to appropriately accommodate essential qualitative dimensions of Indigenous health and wellbeing (which includes spirituality as a key part). The mainstream approach to research
inquiry “is antithetical to other modes of consciousness that recognise and value what cannot be measured as being essential to a poetic [or in the case of Indigenous Affairs, spiritual] existence” (Giroux & Evans, 2015, p. 95; see Grieves, 2009).

Positioned in a constructivist and interpretivist framework, this approach maintains that meaning and truth cannot be reduced to a universal state, but rather is produced or constructed in certain political, cultural, social and economic (historical) contexts (Searle, 1995; Marinova & Hartz-Karp, 2017). Taking a ‘position from nowhere’ is theoretically unsound as the production of knowledge is always already value laden. Between researchers and research participants, meaning is co-created in an inclusive and safe space of inquiry (Kearns, 2000, p. 107). In this sense, mixed methods operates according to a participatory (engaged) research paradigm, and a participatory methodology allows for collaborative research activities and thus for researchers and participants (or ‘stakeholders’) to co-create outcomes (i.e. strategies and policies).

The principle stakeholders in this project are educators and training organisations, industry contacts, and Indigenous community representatives interested in the social, cultural and economic health and wellbeing of young Indigenous Australians in Perth, WA. Approval of ethics was granted by Curtin University and Swinburne University of Technology and the research was conducted in consultation with the Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research (National Health and Medical Research Council [NHMRC], 2017).

1.9 Contribution to knowledge

This Ph.D. research project has sought to make progress towards theorising a new approach to policy design and implementation that generates democratic and innovative outcomes in complex socioeconomic, cultural and political environments, such as those found in Indigenous Affairs. More specifically, it has sought to make small yet significant steps forward in building a theoretical design foundation from which to empower marginalised ‘end-users’ to participate in the design and implementation of policies, programs and services that effect them most. The project identified and reworked key theoretical design components
from service design thinking to help bridge the conceptual and methodological divide between policy and praxis, with particular focus on enabling Indigenous Australians and communities “to become stronger agents in their own [agenda for change]” (Hunt, 2013, p. 31).

It is important to note that this project did not draw on specific service design thinking tools or practices but rather worked towards developing a framework based on service design thinking principles from which designers and co-designers could then operationalise such practices. Broadly speaking, this thesis has been primarily interested in generating unique insights into the conceptual possibilities of an alternative design process in Indigenous affairs policymaking. The empirical application of the framework developed within this project has yet to be operationalised. Instead, this thesis has focused on the theoretical development of a design framework and gathered primary and secondary evidence for its possible effectiveness. Put differently, the point of this thesis has not been to demonstrate how the framework works in reality, but rather to work towards a theoretical design framework that can address the majority of conceptual design difficulties identified in the literature and primary research.

The effort to theorise a new approach to designing and implementing governmental policy and its subsequent (education and training) programs and services is an attempt to help pave the way towards generating a significant amount of culturally-appropriate economic opportunities for Indigenous Australians in the upcoming green economy, particularly in regions often neglected in the literature but that show great potential for implementing sustainable place-based economic development. It is a contribution grounded in theory but with the direct intention of informing real-world, systems-level change. Implementing an alternative policy development framework in urban-rural and inner regional areas that empowers Indigenous Australians to engage in the green economy (and direct their own projects) could lead to significant social and economic change within disadvantaged communities.

It is important to point out that the present thesis differs to the ARC Linkage project as it only provides a very specific response to the ARC’s main research objectives (see above). In other words, it answers and responds to the objectives from a specific theoretical design framework or perspective. The critical design thinking framework developed herein necessarily leads to research outputs that differ from those generated by the ARC project. This is because the latter has taken a more general approach to thinking about how Indigenous
participation in the green economy can increase given the current political and economic climate. This thesis generates outputs that are more critical in nature in the sense of challenging the status quo.

The main research question this thesis seeks to respond and contribute original knowledge to, is the following: “Given that the design frameworks used to develop and implement Indigenous policies, programs and services have had difficulty supporting Indigenous cultural and development needs, what critical theoretical design components are required to assist in the reconceptualisation of a design framework that can generate culturally appropriate outcomes, especially in relation to the business and employment opportunities of an upcoming green economy?”
It must be stated that significant emphasis has been placed on the importance of subjecting existing design and implementation frameworks in Indigenous affairs to rigorous critical analysis, as it is argued here that the latter reveals the many issues and flawed design principles that currently underpin Indigenous affairs, and that understanding these issues will enable researchers and designers to overcome them when designing policies and services from an alternative design framework. It is for this reason that Chapters 2, 3 and 4 are dedicated to critically examining the logic and design principles that currently underpin Indigenous affairs.

2. Imbalance between policy and practice in Indigenous Affairs

The Australian Government’s Department of Indigenous Affairs is often characterised in the literature as a complex organisational structure or governmental system—Altman (2004) referred to it as an “extraordinarily complex policy domain” (Altman, 2004, p. 36)—that has been designed to address the social and economic disadvantage experienced by Aboriginal and Torres Strait Islander Peoples (hereafter Indigenous Australians) (Commonwealth of Australia [COA], 2015; Sheehan, 2011, p. 75; Moran, 2016, p. 191). As a complex governmental system, Indigenous Affairs is seen as a “regime” (Local Government Advisory Board [LGAB], 2008, p. 83) in the sense that it is made up of a vast array of institutional systems that all work to design (conceptualise, develop and implement) Indigenous-focused policy (Sheehan, 2011, p. 75).

The overall operation of Indigenous Affairs (the way in which policy is designed and implemented) is often implicitly understood in the literature according to two main design stages: 1) the conceptualisation and development of policy; and 2) the implementation of policy in practice (typically manifested in Indigenous-specific programs and services). An examination of the literature revealed that the second stage of design in Indigenous Affairs has been neglected by policy researchers relative to the process of policy conceptualisation and development, and thus the former is an area of research that is relatively undeveloped in
the literature (see Sullivan, 2011; Cox, 2014; Hunt, 2013). The Australian National Audit Office (ANAO), in its 2007 Audit Report, entitled, ‘Whole of Government Indigenous Service Delivery Arrangements’, concluded that the “[Australian government’s] approach to Indigenous service delivery to date has had a strong emphasis on policy development and priority setting. Insufficient attention has been given to policy implementation . . . This has hindered moving from the policy environment to on-the-ground service delivery” (ANAO, 2007, p. 21, emphasis added).

The process of policy conceptualisation and development has taken precedence over the pragmatic process of implementing policies, programs and services in Indigenous Affairs; the government’s approach to service (and program) design and delivery has overemphasised the formal process of conceptualising and developing policy agendas in an abstract (decontextualised) institutional setting, and paid insufficient attention to the practical side of design in Indigenous Affairs. As the prominent Indigenous Australian academic and lawyer Noel Pearson declared, in a foreword to Mark Moran’s Serious Whitefella Stuff: When solutions became the problem in Indigenous affairs (2016), “our understanding of the mechanics of change [design and implementation procedures] in Indigenous Affairs is nascent at best. And at our peril, it is too often left entirely unexamined. Policy and politics in Indigenous Affairs attract a great deal of attention. Practice, despite its critical importance, does not” (Moran, 2016, p. 9, emphasis added).

In 2014, the non-Indigenous Australian sociologist Eva Cox, after an extensive review of the Indigenous Affairs literature, similarly concluded that “limited official attention is paid to procedural issues such as how politicians and bureaucrats implement [Indigenous] programs [and services]” (Cox, 2014, p. 4, emphasis added). Entitled ‘What Works and What Doesn’t Work in Indigenous Service Development’, Cox’s study further concluded that “it is clear that there is limited . . . discussion on how Indigenous-focused programs are, or should be, designed and delivered. The focus is on funding and intentions” (2014, p. 6). Cox’s (2014) report supports the claim that the government’s focus has been on the first stage of design in Indigenous Affairs, which has emphasised the creation of policy outcomes, objectives and funding models in an abstract policy environment. As evidence in ANAO (2007) indicated, neglecting practice has given rise to an approach to Indigenous policy that seems to obstruct ‘movement’ between the first stage of design (policy conceptualisation and
development) and second stage of design (practical, on-the-ground implementation) (see Figure 1).

2.1 Identifying the obstruction between policy and practice in Indigenous Affairs

Discussion on praxis in Indigenous policy-design has been limited, in part, by insufficient critical analysis of the conceptual and methodological details of design and implementation procedures. As at August 2016, less than 10 per cent per 1000 programs implemented in Indigenous Affairs were officially evaluated (see Grant, 2016, p. 64), and the process of ‘official evaluation’ does not necessarily involve comprehensive critical
examination of all design and implementation procedures (i.e. the specific research and design methods used to design and implement policy) (see Lea, 2008). The Steering Committee for the Review of Government Service Provision (SCRGSP), in its 2014 report ‘Overcoming Indigenous Disadvantage’, found that ‘formal’ evaluations of Indigenous-specific programs and services had been “relatively scarce [in the literature]” (SCRGSP, 2014, p. 15).

It is for the above reasons that governments have seldom examined “the effectiveness or otherwise” (Cox, 2014, p. 5) of specific design principles and processes that underpin design and implementation practises in Indigenous Affairs. The effectiveness of research and design methodologies, strategies, tools, techniques and frameworks is what Pearson (2016) referred to as the ‘mechanics of change’, which pragmatically transform policy into real-world outcomes (see Figure 1). As a result, policy-makers have rarely had the chance to understand ‘what works and what does not work’ in practice, let alone have the opportunity to conceptualise and develop an alternative policy-design framework in light of such findings. In Pearson’s (2016) words, “the corpus of learning about the practice of Indigenous Development in Australia is far too small. There is little systematic effort to ensure that we are building this corpus, and applying the lessons learnt through practice to our overarching policy approaches . . .” (Moran, 2016, p. 10). On this point, Moran (2016) stated that:

There is little evaluation or knowledge exchange of the effectiveness of different approaches, or practice tools and frameworks. What exists [in the Indigenous Affairs literature] is largely measured [and thus analysed] through externally set administrative Key Performance Indicators (KPIs). Success and failure are determined against the overarching policy, which obsures the effects of actual projects, and what they may actually do locally. Thus, little is known of the actual interactions and realpolitik of local practice; of what actually works or doesn’t work in practice. (2016, p. 177-78, emphasis added)

Similarly, Hudson (2016) concluded in a comprehensive report, entitled, ‘Mapping the Indigenous program and funding maze’ that:
Spending more money on programs to combat Indigenous disadvantage will not lead to improved outcomes, as long as programs continue to be implemented without any evidence of their effectiveness. . . . [Research has shown] there is very little strategy, coordination, or consultation involved in the design and implementation of programs. . . . If Indigenous people are ever to benefit from the considerable public and private investment into Indigenous affairs, the government has to cease funding and delivering programs without any evidence of their efficacy and without any consultation with Indigenous communities. (2016, p. 27-28)

Putting aside for the moment the issue of evidence in Indigenous policy design, it is clear from the above that the procedures (practices) involved in the design and implementation of Indigenous policy are necessarily comprised of certain research and design methodologies, strategies, tools, techniques, concepts and frameworks that facilitate the real-world movement or ‘transmogrification’ of policy into real-world outcomes. But the movement from policy development to on-the-ground service or program implementation has been obstructed, as the government’s overarching policy approach (the theoretical framework underpinning it) has not led to successful outcomes for Indigenous policy recipients on the ground. Logically speaking, this implies that there is a fundamental ‘mismatch’ (irreconcilable relationship) between policy and practice; a conceptual and pragmatic ‘disconnect’ between the two stages of design in Indigenous Affairs, a disconnect that evidence has shown contributes to “the failure of so many government ... programs [in Indigenous Affairs]” (Hudson, 2016, p. 27; see Sullivan, 2011, p. 41; Moran, 2016, p. 191; Phillips-Brown et al., 2013, p. 259).

It is because governments focused on the first phase of Indigenous policy development at the expense of the second that Phillips-Brown, Reddel and Gleeson (2013), in a chapter entitled ‘Learning from experience? Getting governments to listen to what evaluations are telling them’, declared that “Indigenous affairs is largely characterised by a litany of [policy] strategies, but implementation failure” (Phillips-Brown, Reddel & Gleeson, 2013, p. 255). This means that policy strategies are developed in an abstract environment with little concern for the second stage of design in Indigenous Affairs, the result of which causes governments to design fragmented and ineffective programs and services.
2.2 Fragmentation and the need to link policy to practice

The 2008 LGAB’s ‘Report on the Inquiry into Local Government Service Delivery to Indigenous Communities’, concluded that State and Commonwealth governments:

... have acknowledged the need for a new approach to [policy design and implementation in Indigenous Affairs. But] they [governments] have not been prepared to commit to holistic change in this area. . . . However, without a commitment to [holistic] change, . . . governments will continue to attempt to [design and implement Indigenous] services under the current fragmented regime with no clear guidelines, principles or certainty (LGAB, 2008, p. 83, emphasis added).

The lack of a comprehensive (holistic) framework linking the process of policy conceptualisation and development to the pragmatic process of program and service design (the two design stages in Indigenous Affairs) has given rise to an approach that is fundamentally fragmented. The ‘overarching policy approach’ that Moran (2016) referred to is thus not to be understood in a holistic sense, as if this approach is able to bridge the (conceptual and methodological) divide between the first and second stage of design, but rather as an administratively overbearing and rigid framework that overemphasises (favours) the first stage of design over the second stage of design and therefore obstructs movement between policy and practice (see Figure 2).

With respect to the government’s attempt to implement Indigenous policy using ‘whole-of-government’ arrangements, Phillips-Brown et al. (2013) found that “the lack of a binding overarching implementation plan was a major limit to genuine coordination” (Phillips-Brown et al., 2013, p. 258). The researchers are not referring to the lack of a plan or framework to holistically link policy to practice, but rather to the absence of a framework that links and guides pragmatic processes in the implementation phase itself. In other words, the first stage of design (policy conceptualisation and development) is still seen as being separate from the second stage of design. The researchers do not remark on the notion that Indigenous Affairs requires a comprehensive policy and implementation
framework. If the framework does not bridge the conceptual and methodological divide between policy and practice then any attempt to devise a framework for just one of the design stages will likely fail to bring about significant change on the ground.

The non-Indigenous Australian anthropologist Patrick Sullivan, after reflecting on the absence of a framework that he argues should include clear design methodologies, principles, practise tools, and techniques to guide whole-of-government implementation practises in Indigenous Affairs, concluded that “few conceptual and organisational tools were available to the … bureaucracy charged with putting policy into effect … [This contributed to the] failed experiment of whole-of-government Aboriginal affairs administration” (Sullivan, 2011, p. 33). Similarly, the 2012 ANAO Audit Report, entitled, ‘Capacity Development for Indigenous Service Delivery’, declared that “in the absence of an overall strategy [for policy implementation], the impact of individual initiatives within programs is likely to be limited, and may lead to duplication in implementation or a piecemeal approach” (ANAO, 2012, p. 21; see ANAO, 2012, p. 95; ANAO, 2007, p. 34).

This indicates that implementation practices are fragmented insofar as they lack an appropriate (holistic) framework or strategy to guide them in translating policy into practice. And a fragmented (atomised) approach is unlikely to bring about significant change in outcomes on the ground. It is therefore essential not only to develop a framework to connect implementation activities in themselves, but also to conceive a ‘higher-level’ framework that adequately links activities in the first stage of design (policy conceptualisation and development) with activities in the second phase of design (on-the-ground implementation).

The interrelationship between policy and practice has therefore not been adequately theorised (see Hunt, 2013; Kowal, 2015, p. 51). More specifically, there has been a lack of theoretical attention paid to the specific design processes (i.e. research and design methodologies, strategies, tools, techniques, concepts and frameworks) that could be used to ‘couple’ the first stage of design (the process of policy conceptualisation and development) with the second stage of design (the design and implementation of Indigenous-focused services and programs) (see Cox, 2014; Wanna, 2006). An appropriate and sound theoretical framework is required to ‘bridge the gap’ between policy and practice in Indigenous Affairs, and the framework needs to be constructed in such a way as to allow policy-designers and practitioners to freely move between the first stage of design (the policy environment) and the second stage of design (the field of implementation).
Figure 2. Obstruction between design stage 1 and 2; holistic change required
2.3 Inextricable link between policy and practice and the need to open the implementation black box

It follows that implementation praxis requires the support of an appropriate policy framework that allows for design practices to flourish and in turn Indigenous-specific services and programs to be implemented. As Moran (2016) argued, “[p]ractice would not exist without the opportunities, resources and constraints provided by policy” (2016, p. 191). Policy (as a theoretical construct) is inextricably linked to practice (praxis) in an interdependent relationship of co-constitution. Policy acts as a ‘higher-level’ structure that causally constrains or structurally organises its ‘lower-level’ parts (local, context-specific actions and interactions; or activities in the ‘policy milieu’) and guides (causes) them to form or manifest in certain ways. As discussed later, policy has the power to either increase or decrease the configurational degrees of freedom characterising action on the ground.

In his research on the relationship between policy and practice in international development projects, development anthropologist David Mosse found that “policy is more not less important than we imagined: and important in more ways than we realised. . . . When policy works effectively, it is because frontline workers are able to reinterpret and represent their local adaptations as expressions of policy, allowing policymakers to see their practice as policy successes” (Mosse, 2004, pp. 648-667, cited in Moran, 2016, p. 190). An effective policy framework needs to allow for local deviations and adaptations and provide practice with the opportunity to feed back into policy, so the two fields are in a dynamic relationship of communication and co-constitution.

In light of the above, it follows that there exists an explanatory or epistemological gap between the ‘higher levels’ of policy development and the ‘lower levels’ of policy implementation, and that in order to critically examine this gap between policy and practice it is essential to (conceptually) ‘pry open’ the so-called ‘implementation black box’ (see Mosse, 2005, p. 5, cited in Kowal, 2015, p. 27). This is necessary because the government’s approach to Indigenous Affairs has been subject to ‘blackboxing’, a term that refers to an institutional system (in this case, Indigenous Affairs) which concerns itself predominately with inputs and outputs at the expense of the ‘internal’ workings or complexity of the design and implementation process, which takes place between the inputs and outputs and which
constitutes a specific situation in which activities manifest themselves and attempt to transform policy into real-world outcomes.

Blackboxing entails the designer ‘throwing’ predetermined solutions ‘over the fence’ and hoping for beneficial returns on investment (see Flach, 2016, p. 98). This design process is a technical exercise concerned solely with levels of (financial) input and output (in terms of pre-set KPIs) (see Productivity Commission for the Steering Committee for the Review of Government Service Provision [PCSCRGSP], 2016, section 2). It is for this reason that evaluation reports in Indigenous Affairs often assess specific policies and programs in terms of “service inputs (how budgets are spent) and outputs (the actual services delivered), rather than on the outcomes achieved [the lived experiences on-the-ground]” (PCSCRGSP, 2016, section 2.8). With respect to the Closing the Gap policy framework, problems in Indigenous Affairs are responded to on “financial input and statistical gap-closing outcome terms” (Altman, 2010, p. 269). As a result, governments pay little attention to the complex processes (conceptual, methodological) that are used in the ‘in-between space’ of design; that is to say, there is little concern for opening up the ‘design and implementation black box’ that sits between financial input and statistical output (see Figure 3).

Because governments have a limited understanding of how change on the ground comes about (due to insufficient attention being paid to policy implementation and its relationship to policy design), it follows that researchers need to critically examine the complex reality of the ‘mechanics of change’ (what does and does not work in practice), and then discover how to use this knowledge to ‘bridge’ the conceptual and methodological divide between policy and practice in a way that is conducive to successful outcomes in Indigenous Affairs. Much is at stake in the matching of policy to practice, and how exactly policy and practice are to be linked in a way that best suits Indigenous development is an area of research that is undeveloped in the literature. If this is done appropriately then it has the potential to have a significant impact on the lives of the most disadvantaged peoples in Australia. It could be argued that before government policy seeks to ‘close the gap’ on Indigenous disadvantage (assuming that this approach is an appropriate one in the first place) it first needs to close the gap on policy and practice, in a way that is culturally appropriate and theoretically sound.
2.4 **Digging deeper into the framework underpinning the first stage of design**

The first stage of design in Indigenous Affairs (policy conceptualisation and development) operates according to a unilateral decision-making process (see Hunt, 2013). Since policy was first designed by the Australian government ‘for the sole benefit’ of Indigenous Australian peoples in 1972, the Indigenous Affairs literature does not reveal any
evidence to suggest that Indigenous peoples have been included in the decision-making processes that have led to the creation of policy frameworks and initiatives in Indigenous Affairs. As Hunt (2013) concluded, Indigenous Australians have had little to no opportunity to participate in the policy decision-making process (Hunt, 2013, p. 33). This is because the design framework adopted by the government is inherently exclusionary; it conforms to a particular way of ‘design thinking’ or reasoning which stipulates that the first step in policy design is to define the ‘problem’ to be ‘solved’ from an external and centrally-determined position (the abstract policy environment) (see Hunt, 2013, p. 3). This process of design thinking involves firstly analysing and determining the problem, and secondly developing solutions accordingly. As Buchanan (1992) pointed out, this process of design thinking is linear in that it conforms to syllogistic reasoning and the overall design process can be:

... divided into two distinct phases: problem definition and problem solution. Problem definition is an analytic sequence in which the designer determines all of the elements of the problem and specifies all of the requirements that a successful design solution must have. Problem solution is a synthetic sequence in which the various requirements are combined and balanced against each other, yielding a final plan to be carried into production. (1992, p. 15, emphasis added)

In this technical, mechanical and linear approach to policy design, policy-makers are first required to determine the exact coordinates of the problem. The ‘problem’ in other words has to be ‘framed’ or demarcated within certain specifications and reduced to normative statements, such as: ‘Indigenous Australians are disadvantaged because they have a lower socioeconomic status relative to other Australians; the government should therefore do everything it can to close the statistical gap in socioeconomic outcomes’ (see Kowal, 2015; Björgvinsson, Ehn, & Hillgren, 2012, p. 104; Feiner & Roberts, 1990, p. 162).

An analysis of the ‘problem’ of Indigenous disadvantage is provided and the solution logically follows from its premises. The elements of the problem are determined, in this case, to be solely economic in nature (or alternatively, social concerns are reduced to economically-informed variables), hence the assumption that Indigenous Australians require economic
development in the same way as other Australians. The requirements for a ‘successful design’ in Indigenous policy are to have objective, quantitative increases (improvements) in the statistical gap between the two populations, in the areas of employment, education, income, housing, and health (as measured by biomedical indicators). These requirements, when combined, create the principal policy strategy in Indigenous Affairs. Together they create a ‘final plan’ to be operationalised in the ‘real’ (non-abstract) world of policy implementation.

2.5 Predetermined problems and solutions

The solution that the federal government arrives at, considering how the problem has been conceptualised or framed, is thus: equality in standard socioeconomic outcomes should be pursued by designing, funding and implementing a wide range of Indigenous-specific programs and services. However, little to no concern for Indigenous needs and aspirations is evidenced and there is little to no recognition of Indigenous-specific notions of health and well-being. As Hunt (2013) found, “[t]he parameters for discussing the analysis of the problem are centrally determined and fail to take proper account of Indigenous aspirations, ideas of wellbeing, and social contexts” (Hunt, 2013, p. 3). In the mainstream approach to policy-making in Indigenous Affairs, problems are seen to be determinate or to have definite conditions and the “designer’s task is to identify those conditions precisely and then calculate a solution” (Buchanan, 1992, p. 15). This linear way of thinking constitutes the conventional approach to policy design. As Shore and Wright (2011) argued:

[The] conventional [approach to] policy consists of analysing the problem and appraising the range of possible responses, selecting a response on sound and rational grounds, implementing the chosen course of action, evaluating whether the action produced the desired outcome and, in the light of that, revising the policy to be more effective in future. This is widely depicted as a linear process or, recursively, is turned into a policy circle. (2011, pp. 4-5, original emphasis)
Conventional approaches to policymaking conform to a theory of ‘bounded rationality’ in that reasoning takes place within a framework that contains pre-framed problems and solutions and is logically bounded prior to any thorough engagement with policy recipients on the ground (Flach, 2016, p. 96). A ‘rational’ response to the assumption that Indigenous Australians are disadvantaged because they have a lower socioeconomic status relative to all other Australians is thus: Indigenous peoples require objective improvements in standard socioeconomic variables (a quantitative increase in a predetermined, Census-based data set) to equalise life outcomes between the two populations. If this is the case, then the rational authority (the government) can develop policies to “reorganise bureaucratic action to solve particular ‘problems’ and produce a ‘known’ (or desired) outcome” (Shore & Wright, 2011, p. 4). The assumption is that policy agendas, consisting of predetermined goals (i.e. ‘Halve the gap in employment outcomes by 2018’), can be ‘transferred’ via appropriate administrative arrangements (or templates) onto the recipient population following a logical and linear (step-by-step) design (see Appendix 1). As Moran (2016) declared:

[Policies in Indigenous Affairs] assume linear, predictable processes that can map neatly onto administrative arrangements. Frontline workers are expected to follow a logical design, written into funding applications, with reporting against centrally set KPIs [Key Performance Indicators]. They are assumed to have the rational, comprehensive and structured means to implement effectively in evidence-informed ways. (2016, p. 191)

Such a policy can be seen as a ‘rational administrative structure’ insofar as policy decisions and directions for their implementation are logically mapped out using predetermined socioeconomic variables “whose values and correlations are pre-specified by an abstract [rational] model” (Wedel & Feldman, 2005, p. 2). That is, the perceived value of using socioeconomic variables in the design and implementation of Indigenous policy is
premised on the assumption that Indigenous peoples require mainstream socioeconomic development. The correlation between problem analysis and proposed solution is a clear and logical one and is devised in an abstract policy environment, together with funding arrangements and desired outcomes (with audits, progress reports, and compliance checklists to evaluate ‘progress’).

2.6 Blind to the faulty framework underlying design

The technical and logical design expects Indigenous peoples and frontline workers to meet predetermined KPIs via rational administrative arrangements (i.e. the ‘whole of government’ approach to Indigenous Affairs), together with specific services and programs funded by government. When these goals are not met (as is almost always the case), the government, during the evaluation phase, has the tendency to interpret inadequate policy outcomes as being a failure of the policy recipients to act accordingly (Cox, 2014, p. 5; Moran, 2016, p. 195). As Cox (2014) concluded, government reporting (which happens in the evaluation stage after policies have failed to bring about real improvements to Indigenous peoples lives):

... too often assumes that if Indigenous programs [or services] fail despite the apparent good intentions of the funders, it is the failure of the targeted groups’ commitment that result in poor outcomes ... [F]ocus is therefore often on blaming the victims for ‘expenditures wasted’, with presumptions that more central control is needed. (2014, p. 5, emphasis added).

As the government criticises policy ‘targets’ for unsuccessful policy outcomes, critical attention is deflected away from the underlying theoretical framework used by the government to design and deliver policies and programs (Cox, 2014; Moran, 2016). In other
words, in projecting deficiency onto the recipient population researchers have become unwilling to critically examine the possibly flawed framework underpinning the processes used in the design and implementation of Indigenous policy (Cox, 2014, p. 9). Cox (2014) claimed that “little or no attention is paid to other possible reasons for these consistent failures [in policy outcomes], such as errors in how the programs were designed and/or delivered” (2014, p. 5, emphasis added). In other words, with little or no attention being paid to analysing the logic that underpins the design and delivery of Indigenous-specific policies and programs, together with the belief that fault is to be found in policy subjects—what Cox (2014) referred to as “misdiagnosing assumed causes” (Cox, 2014, p. 7)—governments have often assumed that an increased amount of central (top-down) control with more financial resources is needed to bring about positive results in Indigenous Affairs, thus reinforcing a development model or design approach that is (potentially) faulty. As Cox (2014) warned, “[badly designed policies and programs] can end up in more top-down programs that police the victims rather than improving Indigenous life chances” (Cox, 2014, p. 7).

Without examining the underlying theoretical framework possibly contributing to unsuccessful policy outcomes, governments have the tendency to become trapped in reinforcing the potentially erroneous theoretical model used to design and deliver policies, programs and services in the first place. As De Vries (2007) said of Ferguson (1994):

The reality of project failure ... does not lead to a critical re-evaluation of the principles and conceptualisations that underpin the identification, planning and implementation of ... development activities. On the contrary, in a perverse way the same cures are prescribed for the same diagnosis and new, more ambitious projects, with more sophisticated planning techniques are initiated. (De Vries, 2007, pp. 33-34, emphasis added)

As it was pointed out more than two decades ago by Sanders (1991), in his article ‘Destined to Fail: the Hawke government’s pursuit of statistical equality in employment and income status between Aborigines and other Australians by the year 2000 (or, a cautionary tale involving the new managerialism and social justice strategies)’, in attempting to grapple with “social problems which are highly intractable or structural in nature” (1991, p. 16),
governments have often opted for short-term policy interventions that are rich in rhetoric and ‘symbolic newness’ but in the long run fail to significantly change outcomes on the ground. Subsequent governments go on to identify supposed deficiencies (a misdiagnosis) in prior policy interventions and start the whole process again with something “strong and new” (Sanders, 1991, p. 16), but it simply ends up building on past programs “rather than in any way overturn[ing] them” (Sanders, 1991, p. 16). A more substantial critical assessment of the overarching policy framework becomes something that is “safely off in the distant future” (Sanders, 1991, p. 16).

It is for this reason that Cox (2014) argued that “many of the problems of failing programs may be of their own making” (Cox, 2014, p. 8). That is to say, the theoretical framework underpinning the processes used to design and implement Indigenous policy may be inherently “flawed” (Cox, 2014, p. 4), “badly designed” (Cox, 2014, p. 6), or conceptually faulty (Lea, 2008). In the face of policy failure, evidence showed that governments tend to set newly “desired” (ANAO, 2012, p. 27) objectives and performance targets with more detailed “directions” (ANAO, 2007, p. 75) on how to deliver intended results and expectations, again from a centralised management and planning position (see Edwards, Halligan, Horrigan & Nicoll, 2000).

2.7 Failure to rethink the self-undermining logic

Lea (2008) found that despite the vast number of failures in Indigenous Affairs, governments did not commit to “a fundamental rethink of the logic underlying conventions of approach or delivery” (Lea, 2008, p. 79). It is worth quoting Lea at length on this point:

For all the demand for evaluation and notions of evidence within policy, existing approaches that have questionable effect are seldom the basis for a fundamental rethink of the logic underlying conventions of approach or delivery. Instead, pointing to the gaps in policy or to under-resourcing, or to the more that needs to be done for implementation to be fully effective, provides the buttressing arguments that justify new versions of old approaches. If only the perennial issues of implementation fidelity, funding (in)stability or insufficiency, poor compliance,
political will, lack of coordination, insufficient time, community disengagement could be addressed, then the said intervention or program or approach will have a better chance of working. (2008, p. 79)

The ‘gap’ that Lea (2008) highlighted does not refer in this case to the ‘mismatch’ between policy and implementation, but rather to the supposed deficiencies in the development of the policy agenda itself, in the sense argued above by Sanders (1991), where policy-makers work within a rationally bounded and abstract policy environment and do not connect with practice on the ground. It follows, then, that putting a faulty policy (or a policy that has been designed according to a faulty conceptual framework) into effect using a more effective and committed approach (i.e. with more sophisticated planning techniques) will most likely fail to bring about significant change on the ground due to its self-undermining nature.

Such is the conclusion reached by Cox (2014) after reviewing numerous official reports on the “consistent failures” (2014, p. 5) of Indigenous-focused policy. Cox (2014) found that “debate on the effectiveness or otherwise of policies for redressing Indigenous disadvantage often fails to identify and address the possible contributions or difficulties of the processes that underpin the development and delivery of policies and programs” (2014, p. 5, emphasis added). Cox further concluded that “processes of design and implementation are too often ignored despite being a major factor in the success or failure of spending programs” (2014, p. 7).

2.8 Attempts to rethink the design logic via ‘whole-of-government’ approaches

Attempts have been made by the Australian government to improve the effectiveness of on-the-ground implementation through whole of government arrangements, which has moved toward examining the processes used to design and deliver Indigenous policy but ultimately has been ineffective in bringing about significant change to Indigenous peoples’ lives or the way in which policy is conceptualised, designed and delivered, and has in fact only reinstated
a new version of an old approach. As we have seen, Patrick Sullivan, an anthropologist at the Australian National University’s (ANU) National Centre for Indigenous Studies (NCIS), referred to this ‘new’ approach as “the failed experiment of whole-of-government Aboriginal affairs administration” (see Sullivan, 2011, p. 33).

The whole-of-government approach was a response to the (above-mentioned) fragmentation and siloed departmental arrangements within Indigenous Affairs, which have been found to significantly contribute to dysfunctional design practices and piecemeal outcomes on the ground. In other words, there has been a general lack of collaboration between government departments administering Indigenous programs and services (Australian National Audit Office [ANAO], 2012, p. 60). Evidence showed that collaboration increases implementation efficacy, particularly as bureaucratic arrangements become more flexible and thus have the ability to respond relatively quickly to changing circumstances on the ground (see ANAO, 2012). Traditionally, collaboration has been restricted across government departments as a result of bureaucratic arrangements being organised along strict vertical (top-down) lines, or “a vertical responsibility and accountability basis” (ANAO, 2007, p. 22). Within a whole-of-government approach, collaboration therefore aimed to “develop stronger horizontal relationships to better deliver services to Indigenous communities” (ANAO, 2008, p. 22, emphasis added). The plan to maximise connectivity to enable reciprocity between government agencies “hitherto divided hierarchically” (Genosko, 2000, p. 135) was referred to in the Indigenous Affairs literature as a ‘bold’ experiment. As Peter Shergold, former Secretary of the Department of the Prime Minister and Cabinet, commented at the launch of the 2004 Management Advisory Committee’s (MAC) report:

Now comes the biggest test of whether the rhetoric of connectivity can be marshalled into effective action. The Australian Government is about to embark on a bold experiment in implementing a whole of government approach to policy development and delivery .... and the embrace of a quite different approach to the administration of Indigenous specific programmes and services. (Shergold, 2004, cited in ANAO, 2007, p. 16)
Despite plans to increase horizontal working conditions in the whole-of-government approach to Indigenous Affairs, relations between government departments and different levels of government remained vertically separated (Sullivan, 2011, p. 91). Government priorities set in policy agendas at the top (i.e. centrally determined) were superior to the priorities of a single department (see ANAO, 2007, p. 46; Hunt, 2013, p. 8). Conforming to a top-down, linear design model meant that higher levels of government passed down policy agendas to various departments with predetermined objectives to fulfill (Hunt, 2013, pp. 4, 30). In the words of Edwards et al. (2000), the whole-of-government arrangement “had a centralising element, insofar as central agencies were driving policy directions systemically and across agencies. The result has been the tempering of devolution through … management from the centre and a rebalancing of the positions of centre and line agencies” (Edwards et al., 2000, p. 39). Despite an increase in horizontal connections across government departments (and thus in collaborative measures), the whole-of-government agenda remained highly stratified; processes of policy conceptualisation, design, development and program and service implementation were structured hierarchically, centrally driven (Edwards et al., 2000, p. 22), and based on upward (vertical) departmental accountabilities (Hunt, 2013, p. 4). ‘Genuine’ collaboration was therefore significantly restricted (see ANAO, 2012, p. 44).

2.9 The importance (yet absence) of collaboration in policy and practice

A review of the literature revealed that the notion of ‘collaboration’ has been central to the whole-of-government approach to Indigenous Affairs, although it has been left undefined in the literature. The two foundational texts to the government’s whole-of-government agenda, ‘Connecting Government: Whole of government responses to Australia’s priority challenges’ (2008) and ‘Tackling Wicked Problems: A public policy perspective’ (2007; 2012), have made extensive use of the term ‘collaboration’, yet “neither of these collaboration-rich documents defines what is meant by collaboration” (Halligan, Buick, O’Flynn, 2011, p. 86). In ANAO (2007, p. 45), collaboration is referred to as an activity that involves government departments working together in a coordinated manner, but the term ‘coordination’ has been left undefined. It is therefore unclear how the notion of collaboration
has been conceptualised and subsequently operationalised within whole-of-government arrangements to Indigenous policy.

Scholars of collaboration have extensively warned against “the adoption of collaboration as a one-size-fits-all approach” (Halligan et al., 2011, p. 86); in ‘Tackling Wicked Problems’ (Australian Public Service Commission [APSC], 2007; 2012) it was claimed that “[design and implementation] structures and processes must be [uniquely] matched to the task—[there is] no ‘one-size-fits-all’ [approach]” (APSC, 2012, emphasis added). Perhaps this definitional lack implies that collaboration should not be confined to one theoretical framework and instead be creatively adapted to the conditions on the ground. In any case, we have seen that there is a fundamental mismatch between (policy) structures and (implementation) processes; that there exists no overarching policy framework that appropriately matches the two stages of design in Indigenous Affairs, and that evidence showed that this contributes significantly to fragmented and undesirable policy outcomes on the ground. Despite this lack of conceptual clarification with respect to key terms, including a lack of definition for the term ‘innovation’, the ANAO (2007, p. 131) recommended that governments strongly encourage collaborative and innovative practices both in policy development and service (or program) design and implementation.

2.10 Faulty theoretical framework causing fragmentation and the need for an holistic, ‘lessons learned’, flexible approach

It was previously pointed out that frontline workers in a whole-of-government approach to Indigenous policy were in need of an overarching plan or strategy to guide practice on the ground.

In the absence of such a plan, institutional movement between the policy environment and on-the-ground implementation was significantly hindered (see ANAO, 2007, p. 21). This structural disconnect between policy and practice resulted in inflexible and fragmented organisational structures and implementation models. Such “silo-based” frameworks (Stewart, Lohoar, & Higgins, 2011, p. 2) have been shown to contribute to poor outcomes on the
ground for Indigenous Australians (see ANAO, 2012, p. 21; LGAB, 2008, p. 83). In contradistinction to this fragmented approach, evidence showed that complex social problems require a flexible and holistic (or systems) approach as opposed to a fragmented and rigid approach (see Head, 2007, cited in Hunt, 2013, p. 7).

Within a holistic approach, policy and implementation frameworks in Indigenous Affairs would provide policymakers and frontline workers with a supportive environment conducive to two-way communication and feedback and a clear theoretical basis from which to conceptualise and operationalise collaborative practices. ANAO (2012) recommended that implementation frameworks need to provide frontline workers with an opportunity “to respond quickly to changing circumstances and emerging policy initiatives [on the ground]” (ANAO, 2012, p. 21, cited in Hunt, 2013, p. 16). If the framework within which practice operates is too rigid or inflexible then practice becomes obstructed—unable to conceptually and methodologically bridge the divide between policy and practice. Thus ANAO (2007) recommended that “the rate at which the re-design of Indigenous-specific ... programmes is occurring should be reviewed. This would ensure that, where appropriate, these programmes are able to respond flexibly and in an innovative way to the particular circumstances of an Indigenous community or region” (ANAO, 2007, p. 26).

A framework conducive to success in Indigenous Affairs needs to allow for the re-designing of policy if the latter’s framework has been found to prevent innovative outcomes or does not meet local needs on the ground (ANAO, 2007, p. 21). ANAO (2007) claimed that a flexible approach to Indigenous policy design and service implementation requires a “culture of continuous improvement” (ANAO, 2007, pp. 75, 87), indicating that an appropriate design operating environment needs to be in place to allow policy-makers and practitioners to design and re-design improvements to policies and services (or programs) at a rate fast enough to allow for several iterations over an adequate period of time, a process which allows for ‘innovation’ to ‘emerge’ (see ANAO, 2012, p. 42). This design model is known in the literature as an iterative, ‘lessons learned’ approach to Indigenous policy design and implementation (see ANAO, 2007, p. 87).


2.11 Importance of innovation and creativity within a plastic framework and shifting ‘organisational culture’

‘Innovation’ is a term commonly mentioned in the Indigenous Affairs literature (ANAO, 2007, p. 14; ANAO, 2012, p. 131). With respect to the whole-of-government arrangement to policy implementation, Halligan et al. (2011) suggested that the government’s approach needs to be “[open] to innovation and creativity” (Halligan et al., 2011, p. 91). And ANAO (2007) concluded that if the overarching framework is too rigid or inflexible then opportunities for innovation and creativity will be closed or dramatically reduced (see ANAO, 2007, p. 14). ANAO (2012, p. 131) went on to conclude that an increase in the capacity to innovate for a whole-of-government approach is required. This implies that frontline workers would be able to “positively deviate from policy framings” (Moran, 2016, p. 95), have the support of the policy environment to exercise such deviations (or creative experimentations), and that lessons learned would be fed back into the overarching policy framework itself, allowing both domains to evolve together (see Pearson, 2016). In other words, innovation requires an open communication channel between policy and practice, and a genuinely flexible and collaborative operating environment for the design and re-design of policies, programs and services.

‘Organisational culture’ is often listed in the literature as a critical success factor for innovation (see Hunt, 2013; Stewart, Lohoar & Higgins, 2011). An organisational culture that is not supportive of innovation can be “a massive stumbling block inhibiting efforts to change strategic direction and adapt to a changing environment” (Halligan et al., 2011, p. 90). For innovation to occur, policy-makers and practitioners need to be able to change strategic directions and adapt to a constantly changing environment. A supportive organisational culture would therefore need to support collaboration, flexibility, adaptability to changing circumstances, and innovative and creative practices. Further, it has been found that “encouragement of the expression of diverse views, and awareness of different cultures and appreciation of their strengths [is also fundamental to success in whole-of-government approaches]” (APSC, 2012).

Government reports concluded that a shift in departmental cultures in a more horizontal, whole-of-government approach is necessary to support collaboration, flexibility, and innovation, and that change within the bureaucracy has thus far not been realised (Halligan et
al., 2011, pp. 90-91; Hunt, 2013, p. 16). Need therefore remains for an understanding of how best to conceive of such a cultural shift within governmental cultures to support an approach that is conducive to successful outcomes for Indigenous Australians (see Hunt, 2013, p. 2). It has been highlighted in the literature that “developing a supportive culture that encourages innovation has been ... a significant challenge for horizontal approaches” (Halligan et al., 2011, p. 91, emphasis added). Currently, organisational cultures are discouraging flexibility and innovation in Indigenous Affairs. This could be due to the fact that an appropriate horizontal approach to Indigenous Affairs has not been conceptualised or implemented, and that when such an approach has been realised, collaboration and flexibility will likely ensue, and thus give rise to an alternative organisational culture; or that there exists a false assumption in the literature that a more horizontal approach is likely to mitigate against rigid government practices and that something entirely different is required.
Chapter 3

Mapping the conceptual terrain regarding how
the government engages with Indigenous policy recipients

3.1 Design done to clients giving rise to a critical engagement gap

In Indigenous Affairs, the relationship between the government and its policy recipients is largely one-sided; policy decision-making structures and processes are centralised and passive (see Hunt, 2013, p. 17; Reddel & Woolcock, 2004, p. 85). That is to say, insofar as governments are in total control of the Indigenous policy-design process, policy recipients are rendered passive clients or ‘consumers’ of programs and services designed and developed by government officials and policy experts (see Kretzmann & McKnight, 1993, p. 2; Rigney, 2003, p. 77).

Following Nelson and Stolterman (2003), in their work ‘The Design Way: Intentional Change in an Unpredictable World: Foundations and Fundamentals of Design Competence’, we see that the designs in Indigenous Affairs (i.e. policies, programs and services) are “designs ... that are done to clients, like customers or consumers [as opposed to designs that are done with clients]” (Nelson & Stolterman, 2003, p. 42), thus creating a unilateral relationship between government officials and policy subjects, in which one of the two positions (in this case the Australian government) “completely dominates” (2003, p. 47).

Given this unilateral design process, the government’s interaction or engagement with Indigenous Australians is limited. Evidence in the literature revealed that Indigenous policy recipients engage (come into contact) with government officials only to the extent that the former are represented to the latter in exclusionary terms. More specifically, Indigenous policy subjects are presented abstractly to external ‘experts’ in the form of statistics and quantitative data, and little to no direct, real-world engagement with policy recipients takes place. In Feldman’s (2013) words, “the effects of expert labour on ‘policy targets’ do not transpire through direct engagement between the said target and technocrat, but rather are mediated through such secondary, abstract devices as policy representations, administrative templates, standard guidelines, [and] statistical estimates ...” (Feldman, 2013, p. 139). Nelson
and Stolterman (2003) pointed out that this particular design process and environment inevitably “treats the client [policy subject] as an objective, impersonal entity revealed primarily through hard data” (2003, p. 54).

Indigenous policy recipients are implicitly seen by the Australian government as passive ‘policy subject-objects’ insofar as policy decision-making structures and processes are centrally determined and informed principally by data derived from a dataset that has been theoretically framed by normative measures of socioeconomic status (see Feldman, 2013, p. 139; Biddle, 2011). Based on the evidence in the literature, it could be argued that there is a significant engagement or interaction ‘gap’ between policy officials and policy subjects, a “structural isolation” (Feldman, 2013, p. 144) mediated by policy abstractions. The interface between expert labour and policy subject-objects is one that generates an interaction between policy officials and statistical representations or “statistical descriptions” (Stickdorn & Schneider, 2011, p. 36).

Because policy subject-objects are isolated in a centralised and passive design system, it follows that policy subjects are “rendered speechless” (Feldman, 2013, p. 142) by the government. Evidence in the literature showed that Indigenous Australians qua policy subjects are largely unable to speak directly to government officials, thus making Indigenous policy subjects feel “alienated” (Royal Commission into Aboriginal Deaths in Custody [RCIADIC], 1991) from the policy-making process (see Hunt et al., 2008; Harris, 2011). Feldman (2013) argued that “[government] administration must render people speechless through objectification when performing its means-ends business” (Feldman, 2013, p. 146).

‘Means-ends business’ is a term that in the context of Indigenous Affairs refers to the pre-framed and instrumentalised model of design that the government has used to conceptualise, develop and implement Indigenous policy. In this design framework, policy subjects qua isolated units of administration are required to fulfill certain objectives (measured by specific performance metrics) which have been pre-determined by the government, meaning policy subjects are required to ‘engage’ with the government “on terms and for purposes that the state [has] determine[d] unilaterally” (Hunt, 2013, p. 8).
3.2 Passive objects and external experts

Citing the work of political theorist Hannah Arendt (2006), Feldman (2013) argued that during the policy design process, ‘three-dimensional’ and active (as opposed to two-dimensional and passive) citizens (policy subjects), which in the current context refers to Indigenous peoples in Australia, are “abstracted into demographic categories and rendered ‘matters of administration, to be put into the hands of experts’” (Arendt, 2006, p. 81, cited in Feldman, 2013, p. 139). However, the consequences of reducing autonomous and three-dimensional subjects to passive, two-dimensional objects, in an attempt to render them “legible to bureaucracy” (Trouillot, 2001, cited in Feldman, 2013, p. 139), is that it “produces social indifference (Herzfeld, 1992, cited in Feldman, 2013, p. 139) ... and enables ‘economies of abandonment’” (Povinelli, 2011, cited in Feldman, 2013, p. 139).

‘Economies of abandonment’ are structures of management and production in which the ‘object’ being managed and produced is in an estranged relationship with the managerial team (Feldman, 2013, p. 139). In the context of Indigenous policy design and implementation, ‘social indifference’ refers to the indifference exhibited by policy officials to the policy subject qua individual person, but more specifically to the socially- and culturally-informed ways of thinking, being, and doing that are unique to Indigenous Australians, especially in the context of development policy design.

Insofar as governments have reduced Indigenous policy subjects to speechless, isolated units of administration, it follows that policy ‘experts’ “cannot accommodate the particularity of speaking subjects” (Feldman, 2013, p. 146, emphasis added). If a framework could accommodate the particularity of speaking subjects in the design and implementation of Indigenous policy, the framework would need to engage with policy recipients in a way that acknowledges and respects the culturally-rich dimensions of Indigenous life-worlds. As many scholars argued (see Cochran, Marshall, Garcia-Downing, Kendall, Cook, McCubbin & Gover, 2008, p. 22; Smith, 1999; Said, 1978), if these culturally-rich dimensions are excluded from the policy design framework, or inappropriately acknowledged, then the design approach is culturally insensitive and thus unethical.

Cochran et al. (2008) claimed that “[t]he most significant impact of insensitive research is the perpetuation of the myth that indigenous people represent a ‘problem’ to be
solved and that they are passive ‘objects’ that require assistance from external experts” (Cochran et al., 2008, p. 22). In light of this, it follows that the government’s mainstream approach to Indigenous policy constitutes an insensitive and unethical set of research and design methodologies, the consequence of which portrays Indigenous Australians as a ‘problem’ or challenge for Australia to ‘fix’ or ‘address’. Indigenous Australians are represented as passive policy subject-objects in need of help from external experts or designers.

The Federal government’s Closing the Gap policy agenda, which seeks statistical equity in standard socioeconomic outcomes between Indigenous and non-Indigenous Australians, is subtitled ‘The Challenge for Australia’ (see FaHCSIA, 2009, p. 1), and the indicators have been externally set and derived from a framework that represents the values and practices of non-Indigenous Australia (see Altman, Biddle & Hunter, 2004, p. 5). The word ‘challenge’ is synonymous with ‘problem’ and connotes the idea that Indigenous peoples “have rarely been seen as anything other than a ‘problem to be solved’” (Maddison, 2009, p. 1). As academic and policy expert Sarah Maddison (2009) argued, “[r]ather than engaging with Aboriginal people and working in meaningful partnership with them, successive Australian governments have looked for a solution to ‘the Aboriginal problem’” (2009, p. 1, emphasis added).

3.3 ‘Consultation’ and the lack of meaningful participation

The Indigenous Affairs literature criticised the government for failing to appropriately include and engage with Indigenous Australians in the overall policy design process (see Hunt, 2013; Moran, 2016). Indeed, Tom Calma, the former Aboriginal and Torres Strait Islander Social Justice Commissioner, concluded that much of the failure of program and service delivery in Indigenous Affairs was “a direct result of the failure to engage appropriately” (Calma, 2006, emphasis added). At the 2006 launch of the Social Justice Report 2005 and Native Title Report 2005, Calma argued that:
Calma (2006) is arguing for the full participation of Indigenous peoples in the beginning ideation stage of design, all the way to the end stage of program and service development and implementation, in a way that genuinely connects with the life experiences (or the particularity) of three-dimensional Indigenous subjects. In other words, the framework used to conceptualise, develop, design and implement Indigenous policy needs to enable policy recipients to actively participate with bureaucrats and policy-makers in every stage of the design process.

Extensive criticisms of the government with respect to the issue of engagement have led government agencies to adopt a design research method to help facilitate Indigenous involvement in Indigenous Affairs policy decision-making processes, namely the method of ‘consultation’ (Hunt, 2013, p. 19). However, this method has been found to be profoundly inadequate and has reinforced policy subject-object passivity and central decision making structures and processes (see Hunt, 2013, pp. 17, 33; Reddel & Woolcock, 2004). The government’s consultation method involved the sharing of program and service information with policy subjects, but it was for programs and services that had already been designed and developed by the government. There has been a paucity of design mechanisms for facilitating thorough community discussion and participation before the design process begins or during the development phase. On this point, Hunt (2013) cited the 2012 report of the ‘Northern Territory Coordinator-General for Remote Services’, which concluded that:
What is termed engagement by governments is often a largely passive, information session that does not allow sufficient time to engage communities in meaningful participatory planning or decision making. Dissemination of information does not constitute informed decision making by Aboriginal people and is not consultative (Australian Government Coordinator General for Remote Indigenous Services [CGIS], 2012, p. 55; cited in Hunt, 2013, p. 17, emphasis added).

This indicates that the government has reduced Indigenous policy subjects to passive subject-objects and excluded Indigenous Australians from both the first and second stage of design in Indigenous Affairs. On numerous occasions, Indigenous peoples criticised the government for adopting an exclusionary design research method (see Hunt, 2013, p. 17). Before consultative engagement with Indigenous policy subjects is undertaken, the policy agenda has already been set, actions initiated and priorities determined (Hunt, 2013, p. 29; Cox, 2014). As a design research method, consultation is therefore a form of consensus-seeking for policies already conceptualised and developed ‘further up the line’ by government officials. Reflecting on the government’s overall approach or model of designing and implementing Indigenous policy, Boughton (1998), in a comprehensive review of the development of vocational education and training for Indigenous Australians, concluded that:

Ultimately, the [design research] model proves inadequate, especially when States ... impose their goals and performance measures on the community, and consultation becomes little more than a process of seeking community endorsement for policies and strategies already worked out further up the line. (1998, p. 19, emphasis added)

The involvement or participation of Indigenous Australians in the design process of Indigenous Affairs has therefore “often been token inclusion” (Cochran et al. 2008, p. 24; Boughton, 1998, p. 19). As Dillon and Westbury (2007) contended, governments (since the early 1970s) have “maintained the appearance that they have been engaged with Indigenous communities . . . but they have failed to maintain the sustained traction that would have made that engagement substantive” (2007, p. 209, cited in Hunt, 2013, p. 20, emphasis added). Such
findings raise the following questions: what does ‘substantive engagement’ refer to or look like in practice, and what is meant by ‘meaningful participatory planning or decision making’?

The government’s Indigenous Affairs consultative design research method has failed to provide appropriate mechanisms for generating constructive feedback between policy recipients and government officials. Hunt (2013) discovered that:

A common criticism voiced by Indigenous people is that government engagement is simply ‘consultation’, often too hurried, and that there is no feedback about what happens as a result of their input. Some complain of ‘consultation fatigue’ ... often adding that despite an overload of consultation—where people keep repeating the same things to a stream of officials—things do not change much on the ground. (2013, p. 17)

In an anonymous submission to the ‘Collins Review of Indigenous Education in the Northern Territory 1999’, and with specific reference to the consultation process in the design and implementation of education and training programs for Indigenous economic development, it was stated that:

... we think that no-one in the Education Department has read our reports because now you are paying people to come and ask us what we want again. Every year you ask us and every year we tell you but you don’t listen to what we say. Some community members say that you will keep asking until we tell you that we want to be Balanda [a white man], then you’ll stop asking. We are not Balanda, our skin will always be black. (Phillips-Brown et al., 2013, p. 245, emphasis added)

A similar finding by Cox (2014) revealed that “[d]espite repeated feedback from community ‘consultations’ that there are problems with both the processes of designing the policies and programs and their delivery, there are few signs that these are seriously addressed [by government officials or policy researchers and designers]” (Cox, 2014, p. 4, emphasis added).

The above evidence provides support for the claim that designs in Indigenous Affairs (i.e. policies, programs and services) have been imposed on Indigenous peoples (see
Boughton, 1998, p. 19; Ding Leong, 2003, p. 52; Godbold, 2009, p. 125); that designs are done to Indigenous policy subject-objects who are seen as customers or consumers as opposed to designs done with, for and about three-dimensional policy subjects (Nelson & Stolterman, 2003, p. 42). As an anonymous Indigenous manager in the VET sector put it, “the development of policies, programs and curricula for and about Indigenous Australians, continues to be as elusive to Aboriginal people as the search for the holy grail” (Robertson et al., 2005, p. 135).

Evidence suggested that Indigenous Australians “have had little say” (Hunt, 2013, p. 17) in the design and implementation of Indigenous policy and that their cultural concerns have been “poorly addressed” (Hunt, 2013, p. 17). Indigenous policies, which are implemented via top-down administrative and organisational arrangements (i.e. whole-of-government arrangements), fail to provide an adequate and appropriate engagement framework in which Indigenous Australians can be meaningfully heard and their culturally-informed values, aspirations and needs respected and taken seriously. Hunt (2013) concluded that “[i]n Australia, research indicates that Indigenous engagement works best in a framework that respects Indigenous control and decision making and supports development towards Indigenous aspirations” (Hunt, 2013, p. 33).

The engagement conditions that the government has set up in Indigenous Affairs have proven to suppress rather than promote the possibility of genuine collaboration and participation between government officials and policy subjects. Hence, despite evidence showing that Indigenous Australians want to engage with governments in the design and implementation process, “the mechanisms for them to do so appear not to be ‘fit for purpose’...” (Hunt, 2013, p. 20).

3.4 Two critical engagement gaps due to faulty theoretical framework

It is important to point out that Indigenous Affairs has been unable to set up the right conditions for genuine coordination, collaboration, engagement, and participation not only between government departments and officials (as we saw in the whole-of-government approach to Indigenous Affairs), but also between policy experts and policy recipients. It
follows that an adequate and appropriate engagement framework needs to maximise institutional connectivity, flexibility, and movement while also bridging the structural divide which has obstructed meaningful participation between bureaucrats and three-dimensional policy subjects.

Figure 4. Two-part structural divide in the engagement framework

With respect to whole-of-government arrangements in the design and implementation of Indigenous policy, Hunt (2013) concluded that “[w]e [policy researchers] don’t know how to overcome the persistent challenges governments face in trying to engage on the ground in a flexible, whole-of-government way within systems that are based on upward departmental accountabilities” (Hunt, 2013, p. 4; see ANAO, 2012).

Governments have not been able to engage in the pragmatic field of implementation with policy recipients in a flexible and systematic manner insofar as the framework in which these participatory design practices have been conceptualised is inherently fragmented and inflexible, based on a top-down, centralised command and control centre that promotes...
passive decision-making processes. It constitutes a design and implementation framework that imposes policy arrangements on Indigenous peoples who are rendered passive policy subjects and forced to receive solutions pre-determined by government officials. Any attempt to engage policy subjects or to increase existing consultative measures to do so within a framework that suppresses genuine (equal and respectful) participation and engagement will likely fail to produce a design environment conducive to successful policy outcomes.

This claim is corroborated by findings in the Royal Commission into Aboriginal Deaths in Custody (RCIADIC, 1991), which in reference to the design and implementation of education programs in Indigenous Affairs, concluded that:

A policy directed at providing more structures of consultation and decision-making does not, of itself, change the relationships of power and inequality which have so far alienated Aboriginal people from the education system. Specific attention must be paid to this relationship, and to devising appropriate and sensitive mechanisms for transforming it. (RCIADIC 1991, cited in Boughton, 1998, p. 19, emphasis added)

In light of this, it could be argued, following Lea (2008, p. 79), that significant, substantive change is unlikely to occur in Indigenous Affairs unless a fundamental rethink or reconceptualisation of the framework underlying conventions of approach and delivery is undertaken by critical design thinkers and researchers. That despite repeated feedback from Indigenous Australians claiming that there are problems with both the processes of designing and implementing Indigenous policies, programs, and services, ‘things do not change much on the ground’, and governments fail to listen to what Indigenous peoples are saying because the theoretical framework within which the government operates and ‘engages’ them has been inadequately and inappropriately theorised. The framework is inherently sclerotic and fragmented and therefore unable to accommodate the particularity of speaking subjects, nor transform unequal power relations (Lea, 2008, p. 79).

Similarly, Robertson, Demosthenous, Dillon, Van Issum and Power (2005), in their article ‘Talking-Up Vocational Education and Training for Indigenous Peoples in Australia’, cited an anonymous Indigenous Tertiary lecturer, who declared that:
Even when there are policies in place that speak of the participation of our people in making decisions, those decisions have to correlate with what the non-Indigenous educator, the researcher or the curriculum development writer thinks is best. When they [non-Indigenous educators, researchers and developers] think of a way that allows both their thoughts and ours to have equal spacing, then we may very well get somewhere. (Robertson et al., 2005, p. 134, emphasis added)

3.5 The need for equal (participatory and democratic) spacing

The framework or approach that has been adopted by non-Indigenous experts to design and implement Indigenous policies, programs, and services “is structurally incapable of giving shape to values of equality ...” (Kenis & Lievens, 2015, p. 151, emphasis added). The process of designing and implementing Indigenous policy has been based on inequality or “asymmetrical relations of power” (Godbold, 2009, p. 125; Remen, 1996).

As Maddison (2009) pointed out, it is “important to acknowledge that Indigenous Affairs policy is made in a context of enormous structural inequality where governments hold almost all the cards” (2009, p. 20-21, emphasis added). In relation to designing policies in the VET sector, Robertson et al. (2005) similarly concluded that “[i]t was clear that while indigenous peoples hold decision-making positions in the VET sector, they have little involvement to decide, and even less power to promote or veto decisions that are not culturally appropriate, credible or responsive to indigenous peoples’ needs” (Robertson et al., 2005, p. 135, emphasis added).

It follows from the above that a design approach that grants ‘equal spacing’ to Indigenous and non-Indigenous perspectives (i.e. values, needs, aspirations, and worldviews) is an approach that is able to accommodate the particularity of Indigenous speaking subjects and is willing to share power and work in a participative and collaborative manner (Head, 2007, cited in Hunt, 2013, p. 6). This design space would allow for equal, respectful and effective partnerships between policy subjects and policy officials. On this point, Robertson et al. (2005) concluded that:
For effective partnerships [between policy officials and policy subjects], a shift in the way policies, programs and curriculum are developed and implemented is an urgent requirement for the [VET] sector to redress. On a policy and practical level, true partnership is needed to allow for the appropriate and equal representation of indigenous and non-indigenous interests to develop and implement policies and practices that articulate and reflect that partnering. (2005, p. 136, emphasis added)

Feldman (2013), following Arendt (1958), similarly argued for an ‘equal space of appearance (a polity)’ in which active, three-dimensional policy subjects can genuinely participate with, and be recognised by, government officials and designers; a space which allows subjects “to appear in the polity—to escape isolation—by directly engaging people as particular individuals rather than speechless policy subject-objects” (Feldman, 2013, p. 140). Similarly for Hunt (2013), in her article, entitled, ‘Engaging with Indigenous Australia—exploring the conditions for effective relationships with Aboriginal and Torres Strait Islander communities’, this equal design space would require a “meaningful discourse in which Aboriginal people have a genuine ‘voice’ ...” (Hunt, 2013, p. 21). The policy framework needs to allow for genuine deliberation and in no way suppress Indigenous views. Being based on values of cooperation and inclusion, this means that minority opinions need to have equal weight to majority opinions. The history of Indigenous Affairs has too often relegated Indigenous views (about social and economic development) “to a subordinate discourse that has great difficulty being heard” (Scott & Durey, 2014, p. 16).

The framework ‘driving’ Indigenous Affairs needs to be conceptualised in a way that empowers Indigenous peoples to actively participate in all design and implementation stages; it needs to enable Indigenous peoples to have a voice in all decision-making processes “from the earliest stage of defining the problem to be solved. Indigenous participation [needs to] continue during the development of policies—and the programs and projects designed to implement them ...” (Hunt, 2013, p. 3, emphasis added). Instead of conforming to a pre-determined agenda, the power to set the agenda needs to be held by Indigenous Australians themselves (Ryan, Head, Keast & Brown, 2006; Couzos, Lea, Murray & Culbong, 2005).

In light of this, the literature identified the need for innovative, inclusive, empathetic, transparent and participative research and design methodologies “to enable [Indigenous
Australians] to participate meaningfully [in Indigenous Affairs]” (Hunt, 2013, p. 6; Henry, 2007; Phillips-Brown et al., 2012). This framework has to be ‘meaningful’ in the sense that it genuinely recognises and incorporates Indigenous cultural values, practices, aspirations, needs and includes them in every stage of design, from policy conceptualisation and development to the design and implementation of programs and services. The literature revealed that valuing Indigenous ontologies and epistemologies in the design process is essential for enhancing “positive cultural identity, and social and emotional wellbeing for Indigenous Australians” (Manning, Ambrey & Fleming, 2015, p. 17). Stanley, Wilkes and Eggington (2014) hint at this when they claim that:

We have got a juggernaut of spending that is wasted because Aboriginal people are not appropriately engaged with the solutions. When Aboriginal people are engaged with the solutions, not only do they work but the self-esteem within the Aboriginal community rises because people are proud and that affects things like adolescent suicide and mental health. (Stanley, Wilkes & Eggington, 2014, cited in Egan, 2014)

For Indigenous Australians to be inappropriately engaged with the policy solutions (outcomes) means that Indigenous Australians are treated as policy subject-objects placed in a pre-determined design framework and consulted with accordingly. To be appropriately engaged with the solutions means that Indigenous Australians have the opportunity to participate in framing, identifying, analysing, and determining the ‘problem’, or the design issue and develop solutions in a participatory and democratic fashion (Hunt, 2013, p. 33).

Having a certain level of control over the policy design process implies that Indigenous Australians are able to align their cultural values, practices, aspirations and needs with policy objectives. Maddison (2009) argued that “[u]nless Aboriginal people themselves are central to determining development goals and agendas, and those goals and agendas are consistent with their unique cultural aspirations, policies directed at economic development for Aboriginal people will simply join a long list of failed policy from the past” (Maddison, 2009, pp. 81-82).

Theoretically speaking, an equal design space needs to enable Indigenous and non-Indigenous Australians to generate collective, shared and equal ownership of the entire policy
agenda, and in effect bridge the structural divide between citizens (policy subjects) and governments. Various studies indicated that “genuine community ownership of problems and solutions is more effective than externally derived solutions and programs” (Hagan, 2009; see Mitchell, 2000; Moran, 2004; Moran, 2016; Ryan et al., 2006; Couzos et al., 2005; Jarvie & Stewart, 2011; Phillips-Brown et al., 2012; Hunt, 2013).

3.6 Politics, power, and the importance of genuine collaboration

An issue central to Indigenous Affairs comes to a head here: that of politics and power. The issue of appropriate engagement or participation showed that Indigenous Affairs “is inevitably political in the sense that it is about the exercise of power and the assertion of interests” (Hunt, 2013, p. 13, emphasis added; see Pitts & Mundine, 2011; Goldsmith & Eggers, 2004; Salamon, 2002). The genuine involvement of Indigenous Australians in all stages of the design process—from problem formulation to policy development and then program and service implementation—is a design process that is fundamentally different to information giving or consultation in a predetermined design framework.

Central to inclusive (as opposed to exclusive) methods of design research and practice is the ability of policy subjects to exercise power and assert views and interests that are different to the mainstream discourse or value framework. If the practice of engagement is inherently political then the government’s approach reduces Indigenous Australians to passive, disempowered policy subject-objects who receive externally derived or designed programs and services, rather than active policy subjects who are able to genuinely influence the policy-making process by exercising political power from the ground up. In contradistinction, evidence revealed that an appropriate engagement framework needs to seek to empower Indigenous Australians in a way that allows them to assert their unique cultural values, practices, aspirations, and needs, and from the very beginning of the research and design process.

By sharing (devolving) power to Indigenous Australian policy recipients and thus agreeing to work in a genuinely collaborative manner, it follows that government officials
need to develop appropriate and respectful relationships with three-dimensional policy subjects and therefore “understand different value frameworks” (Hunt, 2013, p. 7). In more succinct terms, policy-designers need to work in a design framework that *accommodates the particularity of speaking subjects*. This means engaging with Indigenous Australians as active, three-dimensional *political subjects* rather than two-dimensional (apolitical) subject-objects or impersonal bureaucratic entities reduced to official government data and rendered silent in the inevitably political process of designing and implementing policy.

### 3.7 Cognition, the status quo, thinking, and empathy

When policy experts turn citizens into objects, they are exercising what Feldman (2013) termed ‘cognition’, a process which “serves administrative efficiency” (2013, p. 138), in the sense that it renders people legible to bureaucracy (by reducing them to two-dimensional statistical objects) so the government can perform its means-ends (instrumentalised and rationalised) business, its ‘common sense’ task of imposing pre-defend policy arrangements on passive policy subject-objects (see Feldman, 2013, p. 146). In short, cognition serves “the status quo rather than questions it” (Feldman, 2013, p. 146), and in the process fosters social indifference and economies of abandonment. The design framework in which cognition operates will have difficulty accommodating the uniqueness of Indigenous Australian ontologies and epistemologies (or Indigenous value frameworks).

Drawing on Arendt (1978), Feldman (2013) argued that in order for a framework to genuinely accommodate the particularity of speaking subjects, government officials need to substitute thinking for cognition. As Feldman (2013) stated: “[t]hinking, unlike cognition, . . . removes the thinker from his/her empirical circumstances as s/he exits social contact while thinking; and second, *it premises possible alternative courses of action based on the thinker’s assessment of other people’s standpoints*” (Feldman, 2013, p. 146, emphasis added).

The process of ‘thinking’ implies that the thinker (in this case, the policy expert in Indigenous Affairs) is able to transcend the overarching administrative framework and conceptualise alternative policy procedures based on other people’s perspectives or value frameworks. Thinking enables policy-makers to recognise and respect policy subjects as
unique individuals, and recognition of the ‘other’ leads to compassion and empathy or at least
an increase in the possibility of generating an empathetic response, which “is possible only
where the standpoint of all others are open to inspection” (Arendt, 1978, pp. 257-8, cited in
Feldman, 2013, p. 146). This ‘where’ is a space of appearance (a polity) in which government
officials and citizens can interact during the political process of conceptualising, developing,
designing and implementing policy.

It follows that an inclusive framework needs to “pass through the faculty of thinking,
which itself requires a recognition of and engagement with people in the plural” (Feldman,
2013, p. 149). By ‘plural’, Feldman (2013) is referring to the plurality of worldviews (value
frameworks) that different cultures and peoples have or live by, implying that an inclusive
approach to policy-making needs to recognise diversity and difference.

A theoretical parallel can be drawn between Feldman (2013) and Lea (2008), who in
an article, entitled, ‘Housing for Health in Indigenous Australia: Driving Change when
Research and Policy are Part of the Problem’, argued that if Indigenous policy design is to
move away from its current sclerotic state of affairs, then researchers and designers need to
critically challenge the ‘odour of sanctity’ that surrounds Indigenous Affairs. Researchers and
practitioners need to engage in “[a]cidic analyses that cut through embedded systems of
practice and thought [to] create confrontations that are psychologically and materially
consequential ...” (2008, p. 79, emphasis added). ‘Psychologically consequential’ means
government officials and policy-makers need to undergo a substantive shift in mindset (modes
of thought, perspectives, and values) because their “fundamental narcissism” (Lea, 2008, p.
79) prevents them from seriously challenging the status quo and developing an approach to
Indigenous policy that is empathetic and ethical.

Lea (2008) argued that in reference to Indigenous Affairs, bureaucrats and policy-
makers are self-serving or ‘narcissistic’ insofar as they “work to sustain the illusion that their
proposed policy and project frameworks are essential or original efforts” (Lea, 2008, p. 79),
when in reality these frameworks only work to reinstate hegemonic assumptions and
approaches in Indigenous Affairs that essentially are conceptually flawed and culturally
inappropriate. By failing to seriously analyse and challenge the dominant discourse driving
Indigenous Affairs, bureaucrats and policy-makers provide only inadequate or “under-
theorized analyses [of Indigenous policy frameworks]” (Lea, 2008, p. 79) and devise
solutions (or policy projects and frameworks) that have bolstered an always already
inappropriate status quo (founded on a framework that is inadequately theorised). Under-theorised analyses of Indigenous Affairs policy design frameworks that fail to question the hegemonic logic driving Indigenous Affairs simply provide bureaucrats and policy-makers with the illusion that something significant is being done to address Indigenous disadvantage, when instead they are only protecting the institution.

3.8 Repoliticising the Indigenous Affairs discourse

Policy-making is a political affair and therefore has to acknowledge and respect peoples’ “cultural and existential differences” (Guattari, 2009, p. 188). In Indigenous Affairs, this means recognising Indigenous subjectivity or the subjective nature of Indigenous lifeworlds (Altman, 2010, p. 266). As Kenis and Lievens (2015) argued, following Schmitt (1996), “political affairs are the realm of subjectivity par excellence: one cannot understand politics in abstract terms without referring to concrete subjects or actors who decide, take sides, struggle and exercise power” (Kenis & Lievens, 2015, pp. 27-28; see Schmitt, 1996, p. 28).

Concern for Indigenous subjectivity has largely been excluded from the mainstream approach to Indigenous Affairs (see Manning, Ambrey & Fleming, 2015). This is because Indigenous Affairs has been theorised in abstract terms, in the sense that all mainstream policy approaches are premised on a seemingly scientific (technical and economic) framework that simply (myopically) and categorically pursues quantitative increases (objective improvements) in normative socioeconomic and health variables with little or no concern for Indigenous difference, which for the government indicates progress towards closing the statistical gap in standard life outcomes between Indigenous and non-Indigenous Australians (see Sanders, 1991, p. 17). As a result, the hegemonic framework “make[s] abstraction from the speaking or acting subject” (Kenis & Lievens, 2015, pp. 27-28) by turning the latter into passive, voiceless objects “to be put into the hands of experts” (Arendt, 2006, p. 81) and into “the logic of universal administrative control by policy” (Moran, 2016, p. 190).
Governments frame Indigenous Affairs in a depoliticised framework and claim that policy officials are focused on ‘objectivity’ (objective increases in standard life outcomes) and developing technical and economic solutions that are ostensibly apolitical and free of bias. The assumption is that numerical and statistical analyses of Census-based data constitutes legitimate research and that this mode of “knowledge gathering” (Hesse-Biber, 2010, p. 16) is impartial and interpretations of the data (i.e. Indigenous Australians have lower socioeconomic status, therefore all Indigenous peoples desire equality in life outcomes according to standard socioeconomic variables) is apolitical and unproblematic. It follows that governments make the positivist assumption of taking a ‘view from nowhere’, a position which constitutes a method of science “built on a primarily deductive mode of knowledge building ... that privileges value neutrality and objectivity over subjectively derived knowledge” (Hesse-Biber, 2010, p. 14). However, insofar as the policy framework used by governments has been predicated on positivist assumptions, it follows that it will have difficulty accommodating the particularity of speaking subjects (Indigenous cultural needs, value frameworks, and subjectivities) and is likely to deny any political power or freedom to Indigenous policy subjects.


The fact that the scientific field thinks of itself as being exclusively focused on objectivity entails, for example, that it is very difficult to politicise this field, for instance by representing it in terms of we/them distinctions. In contrast, political discourse starts with acknowledging subjectivity. It implies the recognition that one does not take a ‘view from nowhere’, but that one is concretely inserted in a force field characterised by conflicts and power relations. (Kenis & Lievens, 2015, p. 28, emphasis added).

In framing Indigenous Affairs within a scientific discourse free of political bias, governments have in effect depoliticised Indigenous Affairs; the latter has been conceptualised as a ‘post-political discourse’ in the sense that the mainstream approach to Indigenous Affairs is assumed to be free “of what is of the essence of politics, namely power, conflict and decision” (Kenis & Lievens, 2015, p. 22). However, as we have seen, Indigenous
Affairs is inherently political, as it involves the exercise of power and the assertion of interests and thus needs to be repoliticised to be seen as such.

An inclusive approach to Indigenous policy-making requires Indigenous Affairs to be understood as a political discourse, as repoliticisation is necessary for sharing and devolving power and setting up working conditions that are genuinely democratic (see Lefort, 1988; Mouffe, 2006). It is only by acknowledging the process of (re)politicisation that “the political’ as a space of plurality is fully made visible, and a truly political, including strategic, reflection becomes possible” (Kenis & Lievens, 2015, p. 24, emphasis added). Politicisation is a process of “making disagreement and conflict visible” (Kenis & Lievens, 2015, p. 24) so policy officials and policy subjects can deal with conflict in a more democratic fashion from the beginning of the design process.

3.9 Positivism and the effect of depoliticisation

It is important to stress that the government’s approach to Indigenous Affairs—with its emphasis on Census-based data sets and positivistic research methods—undermines Indigenous value frameworks. The use of normative socioeconomic measures to conceptualise and design Indigenous policy portrays a particular (non-Indigenous) society or social reality based on a dominant socioeconomic order that contains cultural values largely at odds with Indigenous peoples’ values, practices, aspirations, and needs (see Altman, 2010; Biddle, 2011).

As a post-political discourse, Indigenous Affairs portrays a hegemonic social reality in neutralising or depoliticising terms, in the sense that the dominant socioeconomic order is seen as ‘natural’ and that one’s desire to participate in it as self-evident, which is a logic similar to cultural assimilationism (see Kenis & Lievens, 2015, p. 24; Arabena, 2006, p. 38). With respect to Indigenous Affairs being premised on a hegemonic ideological framework, Altman (2013) stated that “[political] power is disguised by making a particular discourse appear so natural that its ideological content comes to be regarded as common sense, beyond question. Who can argue with the right of Indigenous Australians to share in the nation’s wealth? Or the urgent need to adhere to higher principle [sic] like normalisation?” (Altman,
This implies that the mainstream approach to Indigenous Affairs depoliticises its own relation to social reality with its claim that it is merely involved in developing apolitical or impartial solutions to socioeconomic disadvantage (see Kenis & Lievens, 2015, p. 23).

As Kenis and Lievens (2015) pointed out, representation (in this case by the government with its use of socioeconomic status) “does more than portray social reality: it co-produces this reality by providing it with an image of itself” (Kenis & Lievens, 2015, p. 23). Put differently, the government works to produce and reproduce an image of society that it assumes to be natural and necessary but which in fact could be otherwise. The political nature of society is concealed, but the process of politicisation needs to reveal society as being “politically instituted, that it is contingent and indeterminate, and that it therefore can be changed” (Kenis & Lievens, 2015, p. 23; see Lefort, 1988). As political theorist Chantal Mouffe (2009) argued:

Things could always have been otherwise and every order is predicated on the exclusion of other possibilities. It is always the expression of a particular configuration of power relations. What is at a given moment accepted as the ‘natural’ order, jointly with the common sense that accompanies it, is the result of sedimented hegemonic practices; it is never the manifestation of a deeper objectivity that would be exterior to the practices that brought it into being. Every order is therefore susceptible of being challenged by counter-hegemonic practices (Mouffe, 2009, p. 549, emphasis added).

Under this light, the process of politicisation reveals that society “has no ultimate foundation, but [rather] is the provisional and contingent result of political decisions and power struggles” (Kenis & Lievens, 2015, p. 22).

When governments claim that its Indigenous Affairs policy agenda is politically neutral because it is based on science and economics, it constitutes a form of politics “in disguise” (Kenis & Lievens, 2015, p. 26). The government’s policy agenda is the result of a political conflict insofar as it denies political power to Indigenous peoples while serving the status quo. However, the government depoliticises this move by focusing on its scientific approach, its neutral and objective practice, which renders the political conflict invisible (Kenis & Lievens, 2015, p. 26).
The government attempts to portray itself as non-ideological, but this is the result of an ideological framework that is depoliticised. Similar to Altman (2013), Kenis and Lievens (2015), following Žižek (1994), argued that the “dominant ideology is the one that succeeds in presenting itself as the opposite of ideology: as natural, logical, evident or as so-called neutral science or technique” (Kenis & Lievens, 2015, p. 26).

3.10 The cultural production of both knowledge and evidence and the importance of politicisation

Normative statements about ‘what ought to be’ are often used to capture the ideological content underpinning policy frameworks (see Lipsey & Steiner, 1981, p. 17). In Indigenous Affairs, the government’s assumption is that Indigenous peoples (in order to overcome socioeconomic disadvantage) need to participate in the mainstream economy to become “subjects of the global project of modernity, to become responsible citizens of a multicultural late liberal state, to be hard-working labourers or profit-driven entrepreneurs in a free market, to be capitalist consumers of mass culture” (Altman, 2010, p. 278).

Normative statements contain “deeply held values or moral judgments” (Feiner & Roberts, 1990, p. 162). That is to say, the government’s assumption is premised on a neoliberalist socioeconomic framework that judges Indigenous peoples disadvantaged relative to non-Indigenous peoples and therefore ‘in need of normalisation’—a cultural bias that ignores the importance of Indigenous value frameworks and inclusion in the policy-making process.

The Indigenous Affairs policy framework is made up of non-Indigenous values and lifeworlds and Indigenous peoples are expected to unproblematically conform to them. Such frameworks have ideological foundations. Despite this, numerous government reports stated that policy-making in Indigenous Affairs is evidence-based and politically neutral (see OID, 2014). As Altman (2010) discovered, “at a time when a central plank of policy-making espouses the value of evidence-based policy-making, free of ideology ... [t]here is, in fact, no evidence of such an approach [in Indigenous Affairs]” (2010, p. 266).
The point is that the ideological framework adopted by the government to conceptualise and design Indigenous policy has become a hegemonic discourse with certain theoretical boundaries that dominate (suppress) all others. The philosopher Antonio Gramsci created the term ‘hegemony’ “to analyse how groups in society exercise power not merely through force, but especially through ideas” (Kenis & Lievens, 2015, pp. 34-35; see Gramsci, 1998). In the context of Indigenous Affairs, the government has delimited the dominant paradigm and “made large parts of the population think in terms of its own concepts ... In other words: [the government’s] way of thinking has become ‘common sense’” (Kenis & Lievens, 2015, p. 35).

The ‘evidence’ that the government gathers to justify its approach to policy-making in Indigenous Affairs derives from a hegemonic discourse with specific theoretical boundaries, or more precisely, specific epistemological, analytical and methodological boundaries that ‘guide’ the overall approach. However, how knowledge is gathered and used cannot be separated from the theoretical framework underpinning its method of collection and analysis. The knowledge or evidence gathered “reflects the values and interests of those who generate it, and it is these values that then determine the methods that are used and the conclusions that are drawn” (Cochran et al., 2008, p. 24, emphasis added). Hence, the use of quantitative data sets for normative socioeconomic measures in a neoliberalist socioeconomic framework to conceptualise and design Indigenous policy reflects the government’s assumption that Indigenous peoples ought to conform to mainstream society and adopt Western values at the expense of their own, and that these values and interests determine the way in which the government goes about designing policy agendas and implementing Indigenous-specific programs and services.

For instance, the ‘closing the gap’ policy framework seeks to increase improvements in socioeconomic status between Indigenous and non-Indigenous Australians using programs and services that are designed with little to no concern for Indigenous value frameworks. In Cochran et al.’s (2008) words, the values, interests, and worldviews of the dominant society can lead Indigenous Affairs “to disregard knowledge that is gained through another set of values and worldviews” (Cochran et al., 2008, p. 24).

The production of knowledge (and hence ‘evidence’) is, in the case of Indigenous Affairs policy, partial; the theoretical boundaries that make up the underlying framework are always already value-laden (Hesse-Biber, 2010, p. 16). This means “researcher values, feelings, and attitudes cannot be removed from the research relationship but instead should be
taken into consideration when interpreting the data as part of the knowledge construction process” (Hesse-Biber, 2010, p. 16, emphasis added). Under this light, the government’s design research methodologies are seen as “cultural artifacts” (Sheehan, 2011, p. 76), a contingent set of techniques founded on cultural biases (see Sheehan, 2011; Smith, 1999; Grieves, 2009). Bias is inherent to the government’s approach to policy design in Indigenous Affairs, and this has a direct effect on the process of “data selection, analysis, interpretation, and the communication of findings ... [Government policy design] cannot assume that an underlying truth free of bias exists” (Sheehan, 2011, p. 79).

The mainstream approach to knowledge production relies on “the correspondence between the method and the assumptive context in which it is implemented” (Sheehan, 2011, p. 77). The assumptive context (the theoretical framework) needs to be critically examined in order to adjust the way in which governments design and implement Indigenous policy. This implies that the legitimacy of the ‘evidence’ has to be questioned, which requires a design research approach that promotes the process of politicisation.

In Indigenous Affairs, any discussion of evidence-based design and implementation must necessarily confront the issue of values, interests, moral judgments, and attitudes, and how the discourse underpinning such factors effect the way in which research and design functions. As Bezaitis and Robinson (2011) stated, in an article, entitled, ‘Valuable to Values: How “User Research” Ought to Change’:

[Governments] like to act as if these [design] choices are not personal, which makes it easy to ignore the idea that values are being expressed throughout a seemingly ‘rational’ process. That doesn’t mean that the issue of responsibility goes away. . . . [The] articulation of values needs to take place across the practical manifestations of the many institutions (corporate and academic) that inform applied work. But clearly articulated values also provide the basis which a particular practice at a particular intersection of knowledge, individuals, intentions, and possibilities can use to orient locally, to nurture identity, and to push back against the limited and often narrowly construed sets of goals that a larger enterprise [or government] ‘wants’ in any given year. (Bezaitis & Robinson, 2011, p. 199, emphasis added)
What Bezaitis and Robinson (2011) referred to as the ‘articulation of values’ is a process akin to what Schmitt (1966) and Mouffe (2006) theorised as (re)politicisation. Bezaitis and Robinson (2011) are in effect arguing for the repoliticisation of applied work, or more specifically, the repoliticisation of the research, design, and implementation process. The authors point out that the process of politicisation (clearly articulating heterogeneous values, feelings, attitudes, and interests) can provide the foundation for a particular research and design methodology in local, context-specific environments, and that this process can empower local identities and prevent inadequately and inappropriately theorised research and design approaches imposing design situations.

With respect to the mainstream approach to Indigenous Affairs, it is important to politicise (or expose) the government’s research and design method because the government’s depoliticised epistemic posture has proven to marginalise alternative knowledge-production methods, especially those that give rise to knowledge gained through Indigenous values and worldviews. It is for this reason that Cochran et al. (2008) concluded that “remedies [to research and design methods] need to be sought at the level of conceptualisation and research design. Researchers must begin to expose the underlying assumptions of Western research and the ways in which this research maintains oppression” (Cochran et al., 2008, p. 23, emphasis added). Cochran et al. (2008) importantly pointed out that “research has been a source of distress for Indigenous people because of inappropriate methods and practices” (Cochran et al., 2008, p. 22).

### 3.11 Vulnerability and the work of ethics

We have seen that the nature of the research relationship between governments and Indigenous Australians (or Indigenous policy subjects) is problematic. Interaction between governments and policy subjects has been mediated by a consultative research method, which is a form of inappropriate engagement that renders Indigenous Australians passive and powerless in the policy design process. The government’s overarching design research
method has had difficulty accommodating the particularity of speaking subjects and thus genuinely ‘connecting’ and empathising with Indigenous policy subjects and their value frameworks. In short, the government’s approach operates in an economy of abandonment and social indifference.

According to Deborah Bird Rose (2013), the government’s *relationship* with Indigenous Australians is suffering from “ethical paralysis” (Bird Rose, 2013, p. 2, cited in Birch, 2016, p. 98). In response, Bird Rose (2013) recommended that an approach to Indigenous policy-design be based on transparency and open dialogue. Government officials, policy designers and practitioners need to be ‘open’ in the sense of “hold[ing] one’s self available to others ... [In doing so] one takes risks and becomes vulnerable. But this is also a fertile stance: one’s own ground can become destabilized. In open dialogue one holds oneself available to be surprised, to be challenged and be changed” (Bird Rose, 2015, p. 128, cited in Birch, 2016, p. 98).

Bird Rose’s (2013) position is in accordance with Feldman’s (2013) position and Lea’s (2008) position, which all argued that ‘experts’ must supplant cognition with thinking so as to open up to other people’s cultural and existential differences. By accommodating the particularity of speaking subjects, experts need to become available to others, and this requires that the epistemological, ontological, theoretical, and methodological ground upon which policy experts stand becomes destabilised, in the sense that the process of opening up to others requires *repoliticisation*, which puts into question all value frameworks and established (common sense) ways of knowing and doing. In this vulnerable but fecund ‘space of appearance’, subjects are open to surprise and the emergence of novel situations and events.

Birch (2016), in an article, entitled, ‘Climate Change, Mining and Traditional Indigenous Knowledge in Australia’, concluded that:

The shift in mindset required to produce meaningful and valuable interactions between Indigenous and non-Indigenous people in Australia is perhaps the ultimate challenge to the nation. Key thinkers in the area, such as Bird Rose, ask that non-Indigenous people begin a conversation that respects Indigenous self-determination while considering the value of relationships built on “connection” rather than “unity.” (Birch, 2016, p. 98)
According to Landry (2008), a ‘mindset’ refers to “the usual ... way of thinking that guides decision-making and represents the order within which people structure their worlds” (Landry, 2008, p. 5). In Indigenous Affairs, the mindset refers to the ontological, epistemological, analytical, and methodological framework that the government depends on to conceptualise, develop, design, and implement Indigenous policy, a process which constructs a certain social reality that Indigenous peoples are largely excluded from (or that does not align with many of their values). Following Birch (2016), researchers need to shift this hegemonic mindset or theoretical framework so it can accommodate and respect the particularity of Indigenous policy subjects, Indigenous value frameworks, genuine (equal and democratic) collaboration, and the process of (re)politicisation.

It follows that an appropriate engagement framework in Indigenous Affairs requires an ethical component, or what cultural theorist Joanna Zylinska termed “the work of ethics” (Zylinska, 2014, p. 124). The ‘work of ethics’ refers to the practise of critically examining one’s constitution of values to enable genuine engagement with others (in a political environment). It could be said that the work of ethics seeks to overcome the ethical paralysis Bird Rose (2013) referred to. The government’s approach is unable to appropriately engage with Indigenous policy subjects insofar as it lacks a framework that embraces the work of ethics and “political complexity” (Hunt, 2013, p. 6).

Birch’s (2016) reference to a relationship based on ‘connection’ rather than ‘unity’ is a relationship that celebrates difference and diversity and that connects via empathy and ethical relations. It does not seek to homogenise policy outcomes by forcing Indigenous peoples to conform to mainstream notions of development in a neoliberalist socioeconomic framework. In order to affirm cultural and existential difference, government officials need to politicise their own relationship to the research and design framework and open themselves to the particularity of speaking subjects and the work of ethics, which requires a destabilisation of the ground they stand on.
3.12 Indigenous autonomy and self-determination

In light of the above, there is a need for policy-makers and design researchers to fundamentally rethink the “weak and compromised philosophical underpinnings of the Australian version of [Indigenous self-determination] policy” (Maddison, 2011, p. 75). Failing to do so means policy-makers remain stuck in the hegemonic discourse and thus inappropriately theorising the notion of Indigenous self-determination. Maddison (2009) pointed out that logically speaking, a ‘top-down’ approach to Indigenous self-determination “is a contradiction in terms” (Maddison, 2009, p. 28). Drawing on the work of Rowse (2002), Maddison (2009) concluded that policies of Indigenous self-determination have “in fact contained underlying pressures for acculturation that where not all that different to the pressures of the assimilation era” (2009, p. 28). It is for this reason that Dodson (2006) stated that the government’s view of Indigenous self-determination having been a failure is a myth, for “[a]n approach that has never been tested cannot be deemed a failure” (Dodson, 2006, cited in Maddison, 2009, p. 34). Given the argument that the mainstream approach to Indigenous Affairs has had difficulty operating according to a theoretical framework adequate enough to allow for Indigenous self-determination, Maddison (2009) concluded that “rather than self-determination having ‘failed’ as . . . the former prime minister [John Howard] would have us think, advocates of Aboriginal autonomy would say that real autonomy, real self-determination, has never been tried in Australia” (Maddison, 2009, p. 43, added emphasis). Maddison (2009) is referring to the fact that Indigenous self-determination will have difficulty emerging if policy-makers continue to operate within a framework that is premised on an unequal power relationship between government officials and policy recipients. The emergence of genuine self-determination requires a design approach that allows for the devolution of decision-making power and enables Indigenous Australians “to become stronger agents in their own development” (Hunt, 2013, p. 31).

Following Lea (2008), we can argue that until the logic underpinning the government’s mainstream approach to Indigenous Affairs is fundamentally challenged and reworked and that the notion of self-determination is both appropriately theorised and operationalised, design researchers and policy-makers cannot claim that the conditions necessary for Indigenous self-determination have been set up.
The ability of government officials to *meaningfully engage* with Indigenous peoples is a critical success factor for advancing Indigenous self-determination, and the relationship needs to be based on connection and empathy rather than unity, indifference and abandonment. More specifically, to accommodate the particularity of speaking subjects, the design and engagement framework needs to *acknowledge and respect Indigenous subjectivity* and work to facilitate the emergence of subjectively-derived knowledge within alternative (Indigenous) value frameworks.

3.13 The importance of design ethnography

A significant amount of the literature showed that in order to bring about an appropriate design relationship between government officials and policy subjects, a design approach that is informed by ethnography is required (see Scambary, 2009; Altman, 2010; Altman, 2009). Commenting on the absence of culturally-informed approaches to policy design in Indigenous Affairs, Scambary (2009) pointed out, in his chapter, entitled, ‘Mining agreements, development, aspirations, and livelihoods’, that “there has been a disciplinary shift in policy development away from the humanities and in particular, anthropology, towards economics” (2009, p. 180). Scambary (2009) is suggesting that in order to recognise, respect, and maintain cultural difference in the Indigenous Affairs policy-making process, it is necessary for policy-makers and design researchers to adopt an anthropologically-informed design framework. To understand the complexity of Indigenous lifeworlds and value frameworks it is essential for design researchers to generate knowledge (i.e. subjectively derived knowledge) using anthropological techniques.

According to Feldman (2013), an ethnographic approach to policy engagement provides the bureaucrat with “an opportunity to re-examine the banality of technocratic work outside its epistemological and ethical limits” (2013, p. 150). That is to say, the epistemological and ethical limits of the mainstream approach to Indigenous Affairs dictates that expert labour engage with Indigenous policy subjects in an inappropriate and indifferent (unethical) manner, and that in order to re-examine one’s work (i.e. the process of designing and implementing policy) outside these limits, experts need to politically engage (connect) with policy subjects,
undergo the work of ethics, and develop a genuinely inclusive relationship (Feldman, 2013, p. 138).

An approach to design and engagement that is informed by ethnography could help policy officials escape from the scientific framework that has made abstractions from speaking subjects and rendered them into two-dimensional statistical objects. As Wedel and Feldman (2005) argued, “policy decisions and their implementation cannot be adequately mapped using variables whose values and correlations are pre-specified by an abstract model rather than situated in an ethnographic context ... Anthropology’s reliance on ethnography to help construct the variables being studied and map their relationships is crucial [to policy design]” (Wedel & Feldman, 2005, p. 2).

The design approach needs to be placed in an ethnographic context to allow policy officials to practice empathy-building and to meaningfully engage with speaking subjects with “a subordinate development discourse that is all too rarely articulated in Australia today” (Altman, 2009, p. 15).

Altman and Rowse (2005) found that Indigenous policy objectives to close the gap in socioeconomic status fail to promote Indigenous autonomy, choice and self-determination, as the approach favours equality (unity and sameness) over cultural and existential difference (see Altman & Rowse, 2005, p. 159). A shift in emphasis from sameness to difference in the policy-making process therefore requires “the advice of anthropology” (Scambary, 2009, p. 180) as opposed to the advice of (neoclassical) economics.

The government’s observation of Indigenous peoples being disadvantaged relative to all other Australians leads governments to conclude that based on ‘empirical evidence’, Indigenous peoples require advancement according to a neoclassical notion of socioeconomic development. However, this approach denies Indigenous aspirations, values, and needs while bolstering the status quo. It is in this light that we can understand the use of quantitative data sets for design as providing the government with “a feeling of control ... [because this approach] only answers what you want to know” (Stickdorn & Schneider, 2011, p. 140; see Giroux & Evans, 2015, p. 94). The government develops the policy approach by setting up pre-determined problems and solutions in a normative socioeconomic framework and then uses the evidence (the knowledge produced according to the underpinning framework) to answer its pre-determined problems. This implies that the government only ‘sees’ what its “chosen theoretical categories permit to be seen” (Feiner & Roberts, 1990, p. 178); the only
‘solutions’ the government sees are the ones that accord to their pre-framed ‘problems’. This highlights the notion that the principal problem in design is the way in which the problem has been conceptualised. And in Indigenous Affairs, it is essential for Indigenous Australians to conceptualise the problem to respond to.

With respect to the claim that the mainstream approach to Indigenous Affairs favours cultural homogeneity over cultural heterogeneity, Giroux and Evans (2015), drawing on the work of American writer Anne Lamott, argued that “a focus on data deprives people of a sense of autonomy and choice, ‘because if you’re going by the data and the formula, there’s only one way’” (Feiler, 2014, cited in Giroux & Evans, 2015, p. 94). The ‘formula’ can be understood in the context of Indigenous Affairs to refer to the methods used by governments to design and implement Indigenous policy, the use of official data in a normative socioeconomic framework to drive policy conceptualisation, development, design, and implementation. Knowledge-gathering techniques (i.e consultation in a pre-framed design plan) to collect ‘data’ is an epistemological posture that gathers ‘facts’ to bolster the status quo.

In order to affirm difference and diversity it is necessary to adopt an alternative approach that embraces political complexity and the singularity of speaking subjects. Put differently, the theoretical framework underpinning the government’s approach “is antithetical to other modes of consciousness that recognise and value what cannot be measured [i.e. Indigenous notions of wellbeing and connections to country] as being essential to a poetic [or in the case of Indigenous Affairs, spiritual] existence” (Giroux & Evans, 2015, p. 95; see Grieves, 2009). That which cannot be measured by the mainstream approach are variables that ethnographic approaches to design research can help generate and thus work toward fulfilling.

It is for this reason that Giroux and Evans (2015) concluded that an overemphasis on data (in this case, Census data) “ignores or diminishes the human experiences in which democratic values of social relations are rooted: the bonds of solidarity, community, friendship, compassion, and love. In doing so, it carries the weight of a deadly form of dehumanizing logic wedded to notions of control, violence, and ideological purity” (Giroux & Evans, 2015, p. 95). The government’s policy design framework has had difficulty acknowledging the complexity of Indigenous lifeworlds and the culturally-informed context in which alternative values deemed essential to Indigenous health and wellbeing arise, such as
connections to community, country, and Indigenous spirituality. The logic underlying conventions of approach is *dehumanising* insofar as it deprives Indigenous peoples of a sense of freedom, autonomy, culture, and power, while simultaneously imposing policy arrangements that force Indigenous peoples to adopt cultural values largely at odds with their own. Reducing three-dimensional speaking subjects to passive, two-dimensional policy subject-objects constitutes a form of *conceptual violence* that desires ideological purity: that is to say, a desire for Indigenous peoples as objects to be put into the hands of experts and then into the dominant socioeconomic order. Ethnography needs to be incorporated into the design approach if it is to overcome these conceptual pitfalls.
Chapter 4
Mapping a theoretical framework appropriate for effective design practices in Indigenous Affairs

4.1 Human-centred design, the notion of a ‘service’, and design for advertising

We have seen that in order to enable Indigenous Australians to participate meaningfully in the policy-design process, an ethnographic approach to engagement is required. We arrive here at the intersection of design and anthropology (see Bezaitis & Robinson, 2011, p. 185). Originally developed as a qualitative research technique in anthropology, ethnography is now widely used in the social sciences to study the complexity of other peoples’ culturally-informed standpoints and lifeworlds or other peoples’ ontological and epistemological frameworks. Barnard (2000) defined ethnography as a means of “making sense of other peoples’ mode of thought” (Barnard, 2000, p. 4). In the context of Indigenous Affairs, this ‘mode of thought’ refers to the complexity and uniqueness of Indigenous lifeworlds. Unlike the government’s positivistic (quantitative analytical) approach to research, ethnography is a post-positivist methodology fundamentally interested in the lived experiences of peoples in specific sociopolitical and historical contexts (Hesse-Biber, 2010, p. 132). A post-positivist methodology claims that a ‘position from nowhere’ is not possible and that knowledge production is partial insofar as theoretical boundary conditions are always already value-laden.

Given the claim that there is no objective reality free of bias, post-positivist methodologies embrace subjectively-derived knowledge (subjective realities) as a fundamental part of the construction of meaning and truth (see Hesse-Biber, 2010). In this paradigm, epistemology is thus inherently political and concerned about relationships of power and control. In the context of design studies, ethnographic research methodologies are utilised to elicit context-specific knowledge and insights to better inform the design and implementation process. Design ethnography is:
... a structured process for going into depth of the everyday lives and experiences of the people a design is for. The intention is to enable the design team to identify with these people, to build up an empathic understanding of their practices and routines and what they care about. This allows the team to work from the perspective of these users on new designs ... Designers use this understanding to work on idea generation, concept development and implementation. (van Dijk, 2011, p. 102, emphasis added)

The use of ethnography in design puts culturally-informed and subjectively derived knowledge “at the very heart of the design process” (van Dijk, 2011, p. 108). More broadly, the particularity of the design’s ‘user’ (who the design is for) is placed at the centre of the design process. As Stickdorn and Schneider (2011) argued:

. . . a true understanding of ... culture, social context and motivation is crucial. We need to put the [user] at the centre of the service design process. This requires a genuine understanding of the [user] beyond mere statistical descriptions and empirical analyses of their needs. Gaining authentic [user] insights includes the application of methods and tools that enable the service designer to slip into the [user’s] shoes and understand their individual service experience and its wider context. We are all [users]—though with different needs and mindsets. The understanding and disclosure of these disparate mindsets is where service design thinking begins. (Stickdorn & Schneider, 2011, pp. 36-37, emphasis added)

The notion of a ‘service’ in the above service design process refers to a complex societal system such as transport, healthcare, and governmental policy (a systems design) that seeks to ‘serve’ citizens by facilitating improvements in life outcomes (see Norman & Stappers, 2016). In service design thinking, relationships between users and designers constitute an equal relationship rather than a unilateral relationship. The service designer is not ‘helping’ users from a position external to them (in a decontextualised environment), as this presupposes a position of isolation or exclusion and thus a power differential. According to Remen (1996), the concept of serving in a service design framework “is different from
helping. Helping is based on inequality; it is not a relationship between equals. . . . Service is a relationship between equals. . . . Helping incurs debt. When you help someone, they owe you one. But serving, like healing, is mutual. There is no debt.” (Remen, 1996, cited in Nelson & Stolterman, 2003, p. 44, emphasis added).

In the context of Indigenous Affairs, governments have positioned themselves in a helping relationship with Indigenous Australians, in which “all power and resources reside with the helper [the government]” (Nelson & Stolterman, 2003, p. 44), thus placing Indigenous policy subjects in a position of indebtedness. It is important to emphasise that a creditor-debtor relationship conforms to a logic of inequality (see Lazzarato, 2011), implying that an assumption of inequity is underpinning the government’s process of design and implementation. A power differential of this sort works to “[ensure] the ‘deserving neediness’ of subalterns ...” (Kowal, 2015, p. 122) insofar as governments hold the power to construct what Indigenous policy subjects supposedly ‘need’ and then implement policy arrangements to ‘help’ them. The advertising industry operates according to the same logic when it attempts to convince consumers “of needs and desires they have not authored” (Nelson & Stolterman, 2003, p. 46). In Indigenous Affairs, this type of logic treats policy subject-objects as “consumers who are influenced to think ... that they need or desire a ... service developed by ... expert designers” (Nelson & Stolterman, 2003, p. 48).

Rigney (2003) argued for Indigenous jurisdiction and control over the policy-making and implementation process rather than rendering Indigenous peoples passive consumers of government services and programs (see Rigney, 2003, p. 77, cited in Maddison, 2009, p. 58). The logic of advertising in Indigenous Affairs turns policy subjects into passive, powerless objects, and given the government has designed “a passive system of policy development and service delivery ...” (Calma, 2006, p. 18, cited in Maddison, 2008, p. 51), the government finds it difficult to engage with Indigenous peoples as “partners and equal participants in creating a positive life vision” (Calma, 2006, p. 18, cited in Maddison, 2008, p. 51). In effect, governments influence Indigenous Australian policy subjects to see themselves as clients that are dependent on external government services to meet their needs. As Kretzmann and McKnight (1993) argued, this ‘deficiency-oriented’ and ‘needs-based’ approach to policy design and implementation (which renders policy subjects ‘deficient’ and therefore in need of help from external service providers) influences policy recipients “to see themselves as people
with special needs that can only be met by outsiders. They become consumers of services, with no incentive to be producers” (Kretzmann & McKnight, 1993, p. 2, cited in Hyatt, 2011).

For Rans (2005), utilising external service designers and providers in a deficit-based framework works to reinforce feelings of “worthlessness and helplessness” (Rans, 2005, p. 9, cited in Hyatt, 2011, p. 116). Some researchers argued that Indigenous Affairs inadvertently maintains Indigenous passivity and dependence, and that this mindset (assuming external experts are required to help ‘subalterns’) is similar to a “mission mentality” (Maddison, 2009, p. 40; see Maddison, 2008, p. 51). As Pearson (2007) argued:

... the current problems of Indigenous people are very much the result of passivity problems created by earlier interventions. Passivity, at its core, involves an abandonment of responsibility by individuals, families and communities. With the decline of responsibility comes family and community breakdown and social problems. (Pearson, 2007, p. 44, cited in Maddison, 2008, p. 51)

4.2 Active participation, users as designers and owning outcomes

There exists a distinction between designs that are done with Indigenous Australians and designs that are done to Indigenous Australians (Nelson & Stolterman, 2003, p. 42). Designs which are done to Indigenous policy subject-objects (in the sense that intentional change is imposed from above) “is the quintessential opposite of service [as conceptualised in a service design thinking framework]” (Nelson & Stolterman, 2003, p. 43). Designs for change that are done with Indigenous peoples in a democratic design environment promotes equal sharing of power and resources. Service design is therefore opposed to a design approach that fosters unequal relations between service recipients and service designers. In service design thinking, it is claimed that the designer acts as the ‘midwife’ for the user’s genuine needs and desires (see Nelson & Stolterman, 2003, p. 42).

Empathy plays an important role in informing the engagement framework in the service design process. We can claim that an empathic understanding of other peoples’ ‘lifeworlds’ (i.e. ontological, epistemological, and ethical frameworks) is essential for
designers to create a ‘space of appearance’ (a politicised environment) that can accommodate the particularity of speaking subjects. By placing peoples’ mindsets and values at the centre of the design process, service design frameworks design with users and thus enables them to “participate actively in the formation and definition of [a service design project]” (Leong & Clark, 2003, p. 52).

Nielsen (1993) defined the notion of participatory design as that which “focuses on collaborating with intended users throughout the design and development process, rather than designing a system ‘for’ them” (Nielsen, 1993, cited in Godbold, 2009, p. 118, emphasis added). Given service designers aim to collaborate with active users throughout the design process, it follows that service design projects are co-created or co-designed by designers and users. In the words of Stickdorn and Schneider (2011):

Service designers consciously generate an environment ['space of appearance'] that facilitates the generation and evaluation of ideas within heterogenous stakeholder groups. There are a variety of methods and tools for gaining genuine insights from different user perspectives in the creation of services and for the development, prototyping and testing of these service concepts. This is co-creation, and facilitating this in groups representative of your stakeholders is a vital aspect of design thinking and a fundamental part of service design. (Stickdorn & Schneider, 2011, p. 39, emphasis added)

The theoretical framework underpinning service design thinking places users at the centre of the design process so that designers can design with (rather than for) end users (Stickdorn & Schneider, 2011, p. 50). Not only does this require service designers to embrace political complexity (a heterogeneous environment marked by difference and diversity, and thus interpersonal conflict and power relations), but also to consider users as designers themselves (Stickdorn & Schneider, 2011, p. 57). It is worth pointing out that the focus here is on the notion of ‘user’ and ‘end-user’ as theorised within a service design-thinking framework; the below analysis does not exercise the same level of critique with other subject categories or ‘intervention framings’ found in Indigenous Affairs policymaking. The analysis also does not engage with the extensive literature around human-centred design, but rather
focuses on the literature surrounding service design thinking and critical participatory design. The reason for this is that established human-centred design is too often used in buttressing the status quo as it relates to social design and so is seen here to stifle progress in Indigenous Affairs, which requires challenging the status quo (see Pløger, 2004).

Service design thinking claims that all users of the design outcome (whether it be a service, product or policy) should have an equal say in the design process and in all decision-making processes that lead to a design outcome. Co-participatory design methods and tools aim to create an environment that is democratic (see Kyng, 1991), and evidence in the Indigenous Affairs literature showed that a transparent and inclusive design framework makes it possible for the design outcome to be ‘owned’ by the participants themselves. Numerous researchers (Phillips-Brown et al., 2012; Hagan, 2009; Mitchell, 2000; Moran, 2004; Hunt, 2013; Moran, 2016) called for policy-researchers and designers to support “engagement and ownership by [Indigenous] communities in developing the agenda for change” (Phillips-Brown et al., 2012, p. 246). If conceptualised appropriately, service design thinking could provide a framework that can increase chances of ownership among Indigenous Australian policy recipients.

4.3 Participatory and non-participatory design frameworks

Kyng (1991) found that co-participatory design methods work to prevent divisions of labour (i.e. the structural divide between policy experts and policy subjects), worker exclusion (i.e. the exclusion of Indigenous policy subjects from decision-making processes), social alienation (i.e. policy subjects rendered voiceless; social indifference and economies of abandonment), and increase the level of commitment among participants (or users) in the design process.

Divisions of labour and worker exclusion are terms which refer to a model of production and management known as ‘Taylorism’. It has been referenced in the participatory design literature to highlight the differences between participatory and non-participatory design frameworks. Much like the conventional model of policy-making adopted by the government in Indigenous Affairs, the Taylor System is treated as an efficient system of
production (a top-down, linear, centralised command hierarchy) that reduces participants (or producers) to voiceless cogs (see Bødker et al., 2000, p. 6).

Bødker et al. (2000) claimed that the silencing of producers works to undermine the possibility of real contact or communication between managers and workers, as Taylorism operates in a top-down framework that confines producers to artificial boundaries. In short, the Taylor System is a production model antithetical to participatory design, the latter which promotes an egalitarian interaction between producers and users or managers and workers.

In contradistinction to Taylorism, a participatory design approach to design usually functions according to a bottom-up and horizontal framework. Evidence revealed that “many Indigenous people resent what they perceive as the Commonwealth’s top-down approach to policy and program development” (Hunt, 2013, p. 17; see CGRIS, 2012, p. 49). In response, numerous studies argued for a bottom-up, rather than top-down, approach to Indigenous policy and service design (see Fitzgerald, 2013, p. 48; James, 2013, p. 110; Abele, 2013, p. 196; Smith & Hunt, 2008, p. 21).

By empowering those that wish to participate in the agenda for change, participatory design allows for a decentralisation of power (see Clarke, 2011, p. 79). The notion of co-design implies that the artificial boundaries set up between experts and non-experts are ‘relaxed’, to allow for equal (inclusive) engagement (see Bødker et al., 2000, p. 4). In this light, Bødker et al. (2000) claimed that participatory design practitioners should not ask: ‘How do we (as design practitioners) design systems to fit people (from a position external to the design users)?’, but instead: ‘How do we make it possible for people to design their own systems?’ (see Bødker et al. 2000, p. 7).

A design framework that enables Indigenous peoples to design systems for themselves necessitates empowering “local [Indigenous] communities to identify their own problems and develop appropriate responses” (Ryan, Head, Keast & Brown, 2006, p. 316, cited in Hunt, 2013, p. 12). This means that the design agenda (including the problem to respond to) should not be predetermined. If users are to participate actively in the formation and development of the design agenda, the framework must be “open and flexible” (Hunt, 2013, p. 26). The framing and analysis of the design ‘problem’ is a co-design process in itself, and the environment that service designers generate is an open and explorative space that embraces creative experimentation with no predetermined outcomes in mind. In this environment, service designers and participants must “avoid drawing fixed conclusions ... [as they need to
keep] open possibilities for exploration . . . in the design process rather than closing them down” (Raijmakers, Gaver & Bishay, 2006, p. 237, emphasis added).

4.4 Overcoming design constraints to maximise the degrees of freedom of change

Any form of ‘closed logics’ in the design framework needs to be avoided (Flach, 2016, p. 97). It has been suggested that designers need to avoid thinking in terms of ‘problems and solutions’, and instead focus on design situations and possible (often unknown) future states of affairs (Myerson, 2016, p. 101; see Moran, 2016). According to McDonnell (2015), a service design thinker needs to:

... [get away] from the notion of a “problem” to be comprehensively specified (as though it is somehow objectively “there” in the world to be found), and [look] rather at designing as a process of effectuation ... [T]he challenge is to collaborate to establish how a more acceptable state of affairs might be devised with the means at hand. ... Expert designers are attuned not to a “problem” or a “solution”, but to the relationship between (a) possible future state of affairs, and that which is currently the case. (McDonnell, 2016, p. 113, emphasis added)

The mainstream approach to Indigenous policy has been framed by predetermined problems and solutions, the result of which has caused working conditions to be centralised, constrained and inflexible. Problems in Indigenous Affairs are assumed to have definite conditions or determinate properties, and in response, the government devised solutions to address them, in advance of their implementation, or of any application of appropriate research and design frameworks, methods, and tools. However, the theoretical and epistemological framework adopted by the government to conceptualise problems and develop solutions has been inadequately theorised and thus only provided a superficial analysis of the ‘conditions’ in Indigenous Affairs (see Hunt, 2013, p. 6). The result has been a suite of policy solutions that are fragmented, piecemeal, and ineffective. Following Raijmakers et al. (2006) and McDonnell (2016), the government’s policy framework has been
conceptualised in a way that ‘closes down’ rather than ‘opens up’ possibilities for exploration and the development of possible future (unknown) states of affairs.

An adequate (or non-reductive) analysis of, and pragmatic engagement with, what is currently the case in Indigenous Affairs—what Bezaitis and Robinson (2011) called the present set of ‘what is’ conditions (see Bezaitis & Robinson, 2011, p. 198)—requires an approach that not only accommodates the particularity of speaking subjects (i.e. subjectively derived knowledge) in a politicised and empathic space of appearance, but also maximises the degrees of freedom of change that a design situation can undergo.

In this light, the government’s approach to Indigenous Affairs can be seen to reduce a complex social and policy system’s degrees of freedom of change insofar as it functions in a pre-framed and rigid (or inappropriately theorised) framework. The prevention of possible future states of affairs is an effect of the presence of a centralised and inflexible design framework, and degrees of freedom of change could potentially be realised in the absence of such policy and design constraints (see Scott, Bakker & Quist, 2012, p. 283). This is why Moran (2016) argued that policy designers need to be allowed to deviate from policy framings, or work within a framework that enables positive deviations to be fed back into the policy framework itself, implying that the framework needs to be plastic in nature.

To maximise a design situation’s degrees of freedom of change, the ‘space’ of possible solutions needs to be ‘stretched’ and explored (see Clatworthy, 2011, p. 128). This does not mean that ‘solutions’ (possible future states of affairs) become delimited in advance, but rather are acknowledged as being unknowable ahead of time and conceptualised as a possible (positive) future state of affairs that emerge in an unpredictable manner. It follows that a service designer’s epistemic posture is that of not knowing, as the space of possible solutions is fundamentally indeterminate. In the Indigenous Affairs literature, studies found that substantive change comes about in a largely “chaotic and emergent [manner]” (Hagan, 2009, p. 31, cited in Hunt, 2013, p. 29; see Moran, 2016, p. 190).

Unlike the linear model of design thinking adopted by the government—a model of design that follows a linear, step-by-step causal chain from problem analysis to solution development—service design acknowledges a fundamental indeterminacy and non-linearity in all complex design situations (see Buchanan, 1992, p. 15). As Moran (2016) discovered, design ‘problems’ (situations) in Indigenous Affairs “often have no known solution prior to implementation. Attempts to solve one aspect of the problem typically reveal or create others.
The characteristics and interrelatedness of problems are only revealed by proceeding incrementally in practice through the complexity involved” (Moran, 2016, p. 189; see Hunt, 2013, p. 29).

4.5 Reductionism (analytically soluble)

To fully understand Moran’s (2016) point, it is important to point out that numerous governments have assumed that ‘higher-level’ properties in Indigenous Affairs, such as system level changes (i.e. closing the gap in socioeconomic outcomes between Indigenous and all other Australians) are derivable from, or determined by, ‘lower-level’ properties and the relations characterising them (i.e. absolute improvements in individual educational attainment and income status) (Kim, 1996, p. 222; Dupré, 2010, p. 36). Technically speaking, governments have conceptualised Indigenous Affairs, and the situations encountered therein, as a decomposable system made up of linear causal relations. Change is linear insofar as \( x \) input equals \( y \) output in predictable, stable ways. It is for this reason that Indigenous Affairs is largely understood (and subsequently assessed) on “financial input and statistical outcome terms; [for governments] it is all just a simple equation, dollars in, statistical gap-closing outcomes out” (Altman, 2010, p. 269).

As DeLanda (2011) pointed out, “[t]he formula for linear causal relations is ‘Same Cause, Same Effect, Always’” (DeLanda, 2011, p. 383). If governments \( x \) (i.e. design, fund, and deliver programs and services to increase Indigenous educational attainment and income status) then \( y \) (Indigenous Australians will achieve statistical parity in socioeconomic variables with non-Indigenous Australians). In Blackman’s (2013) words, the government has assumed that the “future state of a [complex] social system ... can ... be read from linear projections” (Blackman, 2013, p. 337).

This amounts to what is known in the complex systems literature as ‘part-whole reductionism’ (see Silberstein & McGeever, 1999). Reductionism treats complex systems as mereological (part-whole) structures whose higher-level properties (wholes) supervene on, and are accounted for in terms of, lower-level parts and their arrangements (see Silberstein &
McGeever, 1999, p. 183). In short, a whole, or a property of a whole, is merely the sum of its parts. According to Scharf (1989), “a whole is explained by being shown to be nothing but the parts, inter-related in a certain manner . . . [Reductionism] requires that compound elements (objects composed of parts) and their properties be explainable in terms of their parts and their inter-relations” (Scharf, 1989, p. 602).

Reductionism makes the claim that there exists no epistemological gap between the higher levels and the lower levels insofar as a description at the lower level proves sufficient to describe a higher-level property. A description of the lower-level elements (and their relations) is sufficient to predict or derive higher-level entities. Hence, reductionism’s epistemic posture regards complex systems as *analytically soluble* and complex situations can be “*reduced and analysed with the [linear and rational] techniques of classical problem solving and decision making*” (Jones, 2014, p. 3; Brown & Wyatt, 2010, emphasis added). Put differently, an ‘intervention’ (a premeditated course of action) in a complex social and policy system is *determined analytically*, as problems are assumed to have definable boundaries with a “finite set of potential solutions” (Jones, 2014, p. 5). It should be noted that the notion of an ‘intervention’ in critical design studies is not the same as an intervention as theorised in mainstream policy work in Indigenous Affairs. From the perspective of critical design, a ‘design’ or an intention to design for change in Indigenous Affairs is seen as a political act of disrupting or interfering with the status quo.

### 4.6 Emergence (analytically insoluble)

The literature revealed that in Indigenous Affairs, there exists a “*gap between the public espousal of rational policy and the pragmatic process of ad hoc ‘on the run’ program delivery*” (Sullivan, 2011, p. 41, emphasis added). However, real-world change in Indigenous Affairs is largely chaotic and emergent (see Hunt, 2013; Moran, 2016; Hagan, 2009), and problems and solutions rarely (if ever) present themselves in analytically clear-cut terms. Hence the gap between rationality and pragmatism. By ‘chaotic and emergent’, Hagan (2009) meant that significant change emerges spontaneously out of chaotic (highly complex)
conditions. In a complex social system that exhibits chaotic behaviour (due to its highly complex nature), change at the higher-level is fundamentally unpredictable and therefore analytically insoluble. That is to say, “even given a complete description of all the intrinsic properties of the parts plus their arrangements and interactions, one could not predict certain properties of the higher-level phenomenon” (Deacon, 2012, p. 158). Put differently, there exists a descriptive or epistemological gap between the higher levels and the lower levels insofar as a description at the lower level proves insufficient to describe a higher-level property.

A higher-level phenomenon, or a property of a higher-level phenomenon, is said to be ‘emergent’ insofar as it cannot be explained in, and predicted by, lower-level terms (see Delehanty, 2005, p. 719; Silberstein & McGeever, 1999, p. 186). An emergent property is a novel property, in that a description of the lower-level elements (and their relations) is not sufficient to predict or derive higher-level entities that are different in kind (novel) to their base parts, and which, furthermore, is unable to explain (or reduce) the latter to the laws of the base level.

According to Humphreys (1997), an emergent property “[is not] a new value of an existing property, but a novel kind of property . . . qualitatively different from the properties from which they emerge” (Humphreys, 1997, p. 342). An emergent property which is qualitatively different from and irreducible to its base parts, is a property “that is more than the sum of its parts” (DeLanda, 2011, p. 381, emphasis added). This means that outcomes in complex social (and policy) systems are not predictable a priori and cannot be explanatorily reduced to their components, and hence mapped in a linear, rational fashion. As Monat and Gannon (2015) found, “the properties of the whole are neither attributable to nor predictable from the properties of the components” (Monat & Gannon, 2015, p. 25, cited in Norman & Stappers, 2015, p. 90).

The crucial issue is how design frameworks theoretically and methodologically position themselves in relation to complexity. A brief analysis of reductionism and emergence is essential insofar as it allows us to see that a framework’s design orientation toward complexity needs to be anti-reductionist and treat complex social and policy systems as analytically insoluble.

Certain design researchers claimed that the service designer’s ‘orientation’ to complex systems should not be based on analysis and rational procedure (as this assumes problems and
solutions are analytically soluble and thus change is assumed to be predictable, linear, and enforceable ‘from above’), but rather should be based on openness, flexibility, and ‘intuitiveness’ (that is to say, not dictated by an overarching policy framework with a closed rationale) (see Jones, 2014, p. 15). In this light, we can see that the government’s mainstream approach to policy design in Indigenous Affairs has been based on a theoretical framework that is, logically speaking, closed; it has conformed to a rigid set of design principles that significantly hinder the process of policy conceptualisation, design, and implementation. Stated more generally, the government’s use of conventional problem solving techniques to address the complex situations found in Indigenous Affairs has proven to be erroneous, conceptually and methodologically speaking. Design researchers and practitioners are dealing with extraordinarily complex (social and policy) systems that require alternative research and design methodologies that can creatively adapt to the circumstances and offer the appropriate design, research, and implementation methods and tools.

The design principles that constitute the government’s fixed (inflexible, closed, and rational) approach to policy design are the following: top-down; centralised; external; reductionist; passive; linear; problems and solutions predetermined (assumption that complex systems are analytically soluble); engagement as consensus-seeking in a predetermined design project (assumption of inequity in the design process), and policy as a depoliticised discourse.

As a response to the complexity involved in Indigenous Affairs and the inability of the mainstream approach to adequately respond to it, the literature called for an open, flexible, and adaptive (‘lessons learned’) design framework able to link policy design to implementation (and back again) and that fosters a creative place-based praxis for the emergence of innovative, new, or novel design outcomes.

4.7 Design principles for a framework’s orientation to complexity

Hunt (2013) found that the policy framework in Indigenous Affairs “[has] to be adaptive and responsive and to adjust to what is emerging” (Hunt, 2013, p. 7, 29, emphasis added). Change in complex situations is unpredictable and thus ‘emerges’ through praxis on the ground. This is a critical finding, given that it calls for the theoretical model used to
design and implement policy not only to promote open and flexible design practices, but also to be flexible, open, and adaptable in itself.

We have seen that praxis requires the support of policy; policy is inextricably linked to practice in an interdependent relation of co-constitution. Policy acts as a ‘higher-level’ structure that structurally organises its ‘lower-level’ parts (local, context-specific actions, and interactions; all activities in the ‘policy milieu’) and guides (causes) them to form or manifest in certain ways. Policy frameworks therefore have the power to either increase or decrease the configurational degrees of freedom characterising action on the ground. This is why it is essential to conceive of a policy framework that is responsive, adjustable, and fundamentally adaptive to what is emerging.

Again, the principal reason why policy frameworks need to be theoretically adjustable is because the higher-level policy structure needs to be responsive to what emerges in practice, and thus adjust itself accordingly. Reflecting on this point, and more specifically on the theoretical and methodological mismatch between policy and practice in Indigenous Affairs, Moran (2016) reached the following crucial question at the end of his analysis: “[W]here might attention to ... practice lead, if it was taken from ‘muddling’ ... to actually being better connected to policy, with real-time feedback of its on-the-ground efficacy?” (Moran, 2016, p. 191, emphasis added). ‘Muddling’ refers to the process of ‘muddling through’ complex design situations. It is a design method that moves toward positive change by taking small, opportunistic steps, by “taking whatever action is possible at the moment” (Norman & Stappers, 2016, p. 93), and “fitting the opportunities offered by each successive present, rather than by tackling the entire problem all at once” (Norman & Stappers, 2016, p. 92).

We have seen that the government’s attempt to ‘tackle the entire problem at once’ using a fixed (‘one-size-fits-all’) policy framework has caused significant policy shortcomings. According to Moran (2016), policy and design researchers need to pay more attention to the (conceptual and methodological) process of matching praxis to policy, or more specifically, linking ‘muddling through’ as a design practice (as an experimental praxis) to a policy framework that is receptive and adaptive to what emerges on the ground (instead of a fixed, overarching plan that has been inappropriately theorised). This is an approach that necessarily requires feedback loops between the two stages of design.
Hunt (2013) reached a similar conclusion to Moran (2016), when it was argued that “[the policy design] system [in Indigenous Affairs] needs better feedback loops to become more adaptive to what emerges” (Hunt, 2013, p. 31). In the literature, scholars called for better communication between policy and practice because the two stages of design have a *non-linear relationship*, in that outputs from one domain (i.e. emergent properties during the implementation stage of policy) has an effect on another domain (i.e. the development of the policy framework), and “one [domain] that is affected by another may in turn react back and affect the first” (DeLanda, 2011, p. 385; see Cox, 2014).

What is emerging is a design approach with a specific orientation to complexity (or complex social and policy systems) that is radically different to the government’s mainstream approach. On a fundamental level, the literature has called for the entire design and implementation process to be iterative and hence have the ability to learn. A framework suitable for such a design approach has to be conceptualised appropriately; theoretically, it has to be plastic and allow for novel properties to emerge and feed these results back into the policy framework itself, hence constituting an *open logics* that can learn and adapt. More broadly, we are confronting the question of how to theorise the most appropriate approach to promote and ‘manage’ complex, non-linear processes in policy design and implementation.

### 4.8 The importance of metastable systems and self-organisation

An ‘open logics’ refers to the limits of the framework’s theoretical inputs that act to influence action (behaviour) on the ground and that are continuously “being shaped by the consequences of that behavior” (Flach, 2016, p. 97). In other words, the ‘internal structure or logic’ of the framework (all of the theoretical inputs that make up the framework and the ensuing approach) is itself adaptive and capable of learning from past behaviour. As Flach (2016) stated:

... the consequences of action relative to the wicked problems of complex work domains feed back to change the experience base of the organization [the group
that is designing and implementing the policy]—there is a capacity to learn from past successes and failures—and, in turn, this experience base can feed into the ... control functions to change their properties. (Flach, 2016, p. 97)

Flach’s (2016) ‘control functions’ are theoretical inputs acting to influence action on the ground (see Flach, 2016, p. 96). The framework’s ‘controls’ (theoretical inputs that make up the framework) can therefore learn from praxis and adapt accordingly, which in turn can change what is experienced on the ground. As Flach (2016) further claimed:

An adaptive control system is essentially a self-organizing system, or a self-designing system, to the extent that the internal logic coupling perception [—the theoretical framework through which design processes are conceived—] and action is potentially changing as a function of experience. In essence, this system is continuously rewriting the internal logic guiding its behavior to reflect discoveries resulting from past behaviors. In other words, it is a learning organization. (Flach, 2016, p. 97, emphasis added)

Like all complex (nonlinear) dynamical systems, the Indigenous Affairs policy domain is ‘open’ and can receive and react to multiple inputs from the ‘outside’. Nonlinear open systems are often characterised in the literature as being neither stable nor entirely unstable, but rather metastable (see Dupré, 2010). A metastable system is simply defined as a system with a high degree of non-equilibrium and thus a high degree of potential energy or ‘tension between . . . —as yet unrelated—dimensions or potentials in being’ (Toscano, 2006, p. 139). For Combes (1999), “[t]his energy is called potential because in order to structure itself, that is, to actualise itself according to certain structures, it needs a transformation of the system” (Combes, 1999, p. 11). In other words, a system that is far from equilibrium has the potential to undergo radical change (transformation) and reach qualitatively new ‘states of being’ with a certain degree of stability and order. The emergence or actualisation of potential states (structures) in a complex dynamical system are states that are “endogenously generated” (DeLanda, 2005, p. 14). This is a fundamental feature of open (nonlinear) systems. A system that can generate new states of being (endogenously) is a system that has the capability to self organise. This is only possible if the system is able to adapt and evolve,
which for the current purposes means that the policy framework has the ability to adapt and evolve. Numerous researchers identified “the need for an evolving approach [to Indigenous Affairs]” (Power, Virdun, Sherwood, Parker, Van Balen, Gray & Jackson, 2016, p. 440; see Hunt, 2013; Moran, 2016).

A design approach that fosters the spontaneous emergence of self-organised states or orders in a complex (social and policy) system can be characterised as a ‘self-designing’ framework or system. It is self-designing in the sense that the framework driving the design process is promoting the emergence of certain complex and ordered arrangements (or designs), the result of which are analytically insoluble and thus impossible to determine (design) in advance. Theoretically, this means that the ‘control functions’ underpinning the design framework must be able to undergo the same amount of degrees of freedom of change as action on the ground. This is known as Ashby’s (1958) law of requisite variety, which “asserts that the variety in a control system must be greater than or equal to the variety in the system being regulated” (Jones, 2014, p. 17).

Such a framework constitutes an approach to design and implementation that is iterative in nature and that can learn from past iterations and hence adapt and evolve. Writing from a service design perspective, Stickdorn and Schneider (2011) pointed out that:

> Although design processes are in reality nonlinear, it is possible to articulate an outline structure [design framework]. It is important to understand that this structure is iterative in its approach. This means that at every stage of a service design process, it might be necessary to take a step back or even start again from scratch. The single but very important difference is in ensuring that you learn from the mistakes of the previous iteration. (Stickdorn & Schneider, 2011, p. 124)

In light of this it is important to highlight the emerging design framework’s meta-theoretical design principles. The framework has the capacity to generate design feedback loops between various levels of application, and its ability to change and evolve over time means that the overarching framework driving the design process is plastic in nature. In this sense the framework is simultaneously unifying (holistic) and plastic (capable of adapting to particular circumstances). It could be said that the framework is topological in nature.
4.9 Principles of service design thinking

*Figure 5* depicts the service design framework necessary for an alternative approach to policy, program, and service design in Indigenous Affairs. However, we need to see how praxis fits in, how ‘muddling through’ (proceeding incrementally in practice through complexity) is to be connected to policy and implementation. That is to say, given what we have discovered in the Indigenous Affairs literature, how can we best answer Moran’s (2016) above question: “[W]here might attention to ... practice lead, if it was taken from ‘muddling’ ... to actually being better connected to policy, with real-time feedback of its on-the-ground efficacy?” (Moran, 2016, p. 193).

The argument defended here is that attention to practice leads to *service design thinking*, to the claim that service design could help bridge the theoretical and methodological divide between policy and practice in Indigenous Affairs.

There are three basic principles of service design thinking:

1) User-centred: Services should be experienced through the user’s eyes;

2) Co-creative: All stakeholders should be included in the service design process; and

3) Holistic: The entire environment of a service should be considered.

(adapted from Stickdorn & Schneider, 2011, p. 26)

We have seen that principle one—*User-centred: services should be experienced through the user’s eyes*—aims to place Indigenous Australian policy subjects at the *centre* of the design process. This means practitioners work from the *perspective* of the ‘end users’, which is an approach that requires an empathic understanding of other peoples’ mindsets or value frameworks. An empathic understanding of peoples’ ontological and epistemological frameworks helps to create a ‘space of appearance’ (a politicised environment) that can accommodate the particularity of speaking subjects. In this space, designers work to generate
subjectively derived knowledge in an attempt to design for (in this case, Indigenous) peoples’ culturally-informed needs, aspirations, and desires.

*Figure 5. A self-designing service design framework*
We have also seen that the generation of subjectively derived knowledge requires participatory and ethnographic approaches to engagement. It is in this sense that ethnography turns the field of design into a political (as opposed to a post-political) discourse by acknowledging subjectivity (subjective experience) and value frameworks, and thus conflicts and power relations.

Principle two—Co-creative: all stakeholders should be included in the service design process—follows from the first, as user-centred design creates a participatory environment in which users are seen as (and taken to be) co-designers. The notion of co-design implies that the boundaries between ‘experts’ and ‘non-experts’ are relaxed to allow for equal and inclusive engagement. For Sanders and Stappers (2008), co-creation ‘breaks with convention’ by “blurring boundaries between roles, so that all participants engage in all activities, placing ... participants as *equal contributors* rather than as mere objects of study” (Scott et al. 2011, p. 285, emphasis added; see Sanders & Stappers, 2008). As Bødker et al. (2000) maintained, the boundaries between experts and non-experts need to be dismantled to allow for a holistic co-design process and design space in which *all* voices are equally heard and respected (Bødker et al. 2000, p. 4).

In this case, Indigenous Australians become the experts in the design process; indeed, as Sherwood and Kendall (2013) argued, “[Indigenous Australians] are the holders of expert knowledge about their lives and experiences . . . [They are] the experts on their needs” (2013, p. 92). Jarvie and Stewart (2011) similarly concluded that “it is the community (*not government*) that possesses the most significant knowledge of its problems and community engagement in solving those problems appears critically important” (Jarvie & Stewart 2011, p. 271, cited in Hunt, 2013, p. 11, emphasis added). Sherwood and Kendall (2013) further claimed that “[t]his [—the fact that boundaries between experts and non-experts are relaxed in a participatory approach to design—] necessitates that we as [policy design] researchers listen to and be guided by the voices of the Indigenous experts ...” (Sherwood & Kendall, 2013, p. 89).

Within a service design framework, the emphasis is not only on the notion that so-called ‘end users’ are the experts on their needs, but also on the fact that users are themselves designers. So ‘community engagement’ within a service design framework implies that the boundaries between designers (as ‘experts’) and users (as ‘non experts’) are blurred. Not only does this mean that policy designers function within a space that accommodates the
particularity of speaking subjects, but also that policy designers allow for design processes (all methods and tools) to be made “transparent and accessible to ... end users” (Andrews, 2011, p. 92). Kyng (1991) used the term ‘mutual learning’ to denote the sharing of information and cooperation between ‘designers’ and ‘users’ in participatory design projects (see Kyng, 1991, p. 66). Mutual learning implies that designers learn about the area in which the design project is based (which includes peoples’ value frameworks) and end users learn about the field of design (in this case the design of policy). As stated by Kyng (1991), referring to the latter process: “In the design process, two sets of players must act creatively: end users and professional system designers. This requires that both groups understand major aspects of the process, the techniques and tools applied, and that both groups learn from the process” (Kyng, 1991, p. 69).

Knowledge and expertise needs to be shared between users and designers if the segregation of roles in a design project is to be overcome. With reference to the process of policy design and implementation in Indigenous Affairs, Reddel (2008) identified “the need for improved knowledge transfer between all these actors [in the design process]” (Reddel, 2008, p. 15, cited in Hunt, 2013, p. 32). As Hunt (2013) argued, Reddel (2008), drawing on Moran (2008), “distinguishes between local knowledge held by consumers and leaders and administrative knowledge held by services providers. Bringing these two types of knowledge together can improve Indigenous governance and service delivery, particularly from a place based perspective” (Reddel, 2008, p. 15, cited in Hunt, 2013, p. 32).

‘Administrative knowledge’ (knowledge held by ‘expert’ designers) regarding the techniques and tools of design, needs to be shared with end users in a way that freely permits users to alter the methods and tools of design based on their (local) knowledge and expertise. It is important to point out that service design promotes the co-creation of design processes (methods and tools) themselves, and so the way in which design is ‘exercised’ (through various methods and tools) is to be worked out collaboratively by the designers and users, with transparency and knowledge sharing. Hunt (2013) identified the need for engagement and design frameworks to be designed and owned by Indigenous Australians, that is to say, for the actual “design processes and structures [to be] designed by Aboriginal people and hence viewed by them as legitimate” (Hunt, 2013, p. 29).

More precisely, overcoming the segregation of roles implies ‘bridging the gap’ between ‘local’ (Indigenous) knowledge and ‘administrative’ (non-Indigenous) knowledge in
a way that affirms Indigenous peoples as experts and co-creators in the design process. It is for this reason that design processes and structures are to be made transparent. The ‘sharing’ of design information with Indigenous peoples means they can genuinely influence design processes and structures. In this light, Indigenous peoples are not only policy recipients or users of services and programs, but also the active designers of policies, services and programs. And it follows that if Indigenous peoples are experts and designers, design processes, structures and outcomes are co-owned. If Indigenous peoples have control over the design process (and co-own the methods and outcomes) then the process is seen as legitimate or valid (Hunt, 2013, p. 29).

Co-creation allows for an equal sharing of power and resources (see Clarke, 2011, p. 79). *A service design project that allows for an equal sharing of power and resources is a project that is transparent and inclusive and thus ‘owned’ by the participants themselves.* Put differently, co-design methods in a service design framework celebrate collective (democratic) experimentation and treat the question of value as something to be answered by the collective needs of end users. As we have seen, if values always drive change, and frameworks are always already comprised of values, then the appropriate design approach used in Indigenous Affairs needs to allow for the co-creation of value itself, which a service design thinking framework can provide.

Principle three—*Holistic: The entire environment of a service should be considered*—refers to service design thinking taking a systems-oriented approach to design.

4.10 *Indigenous health and wellbeing and the importance of shifting hegemonic value systems*

Notions of value and legitimacy overlap here, as legitimate design processes and structures are those that bring about positive change to Indigenous peoples lives, that is to say, that support and maintain Indigenous values. Not only is Indigenous control and co-ownership over design processes (including decision-making processes) essential for successful design outcomes, the agenda for change needs to be directed toward enhancing
**Indigenous notions of development and health and wellbeing.** Kennedy (2013) found that Indigenous choices to engage in design processes “are influenced by socially determined, heterogeneous wellbeing values [as well as] pragmatic assessments of the viability and appropriateness of service arrangements in achieving these valued ways of being” (Kennedy, p. 2013, pp. 275-6, cited in Hunt, 2013, p. 20). As Hunt (2013) summarised, “Indigenous people will engage if they can see the connection between what governments (or others) are offering, and how that might enhance their own sense of wellbeing” (2013, p. 20).

Design frameworks in Indigenous Affairs need to focus on (and work toward enhancing) Indigenous health and wellbeing, factors which are largely culturally and socially determined. Service design projects or ‘arrangements’ have to take place in an appropriately theorised framework that supports Indigenous ways of knowing, being and doing (value frameworks). It is for this reason that Tunstall (2013) argued that (service) design thinking and projects “should use design processes and artifacts to work with groups to shift hegemonic value systems that are detrimental to the holistic well-being of vulnerable groups ... and their extended environments” (Tunstall, 2013, p. 7).

Design processes and structures have to challenge and shift hegemonic value frameworks to protect and promote Indigenous ways of knowing, being, and doing and thus work toward enhancing Indigenous health and wellbeing. In other words, *design processes and structures need to be counter-hegemonic to “reveal [normatively expose] and explicate ideological bias ...”* (Sheehan, 2011, p. 75, emphasis added).

As we saw above, interaction between Indigenous policy subjects and governments takes place in a “social space, where power, culture and influence are being negotiated. Thus, ... engagement in this context is inevitably political in the sense that it is about the exercise of power and the assertion of interests” (Hunt, 2013, pp. 12-13). An approach to Indigenous Affairs that seeks to enhance Indigenous autonomy, self-determination, and notions of health and wellbeing must therefore *embed counter-hegemonic practices to expose and challenge the government’s mainstream ideological framework*—a theoretical construct proven to suppress Indigenous values, voices, power, and control. A counter-hegemonic approach is necessary to genuinely equalise power relations and prevent any potential power abuses through research and design (Stephens, 2013, p. 24; see Sheehan, 2011, p. 70; Voyle & Simmons, 1999). As Hunt (2013) concluded, “a high level of [Indigenous] people’s
participation works best and real power sharing is necessary” (Hunt, 2013, p. 33, emphasis added).

From what we have seen, it is crucial that the approach used to generate knowledge in the design process valorises Indigenous ways of knowing, being and doing. Hence the conclusion reached by Cochran et al. (2008), that it is “critical that indigenous ways of knowing are fully integrated into the research design and that the research is both participatory and beneficial to the community” (Cochran et al., 2008, p. 25, emphasis added). Cochran et al. (2008) further pointed out that:

... one might assume that in applying qualitative methods [i.e. ethnographically-informed research methods], researchers will address cultural insensitivity by using methods of data collection that are in line with traditional cultures. However, questions about appropriate research methods and indigenous communities go beyond the “quantitative versus qualitative” debate and focus on the root issue of how we go about knowing. (2008, p. 24, emphasis added)

The epistemic posture that a service design framework adopts (how it goes about generating knowledge) therefore has to be decolonised and indigenised. This is so design projects can “foster a safe social space where inquiry can be conceived and owned by the marginalized in ways that contribute to their well-being” (Sheehan, 2011, p. 76). It is important to remember that:

[k]nowledge reflects the values and interests of those who generate it, and it is these values that then determine the methods that are used and the conclusions that are drawn. These values and worldviews can lead majority cultures to disregard knowledge that is gained through another set of values and worldviews. (Cochran et al., 2008, p. 24)
The approach used in Indigenous Affairs needs to enable Indigenous Australians to generate knowledge in an Indigenous value framework, as this knowledge influences the design methods or the way in which a design project goes about applying knowledge to design processes and outcomes. We have seen that knowledge and subsequent methods developed in a hegemonic (non-Indigenous) framework had failed to centre Indigenous values and thus bring about significant change to Indigenous peoples’ lives. It is in this sense that the way in which knowledge is generated and applied has to embed counter-hegemonic practices. In essence, the approach needs to challenge the status quo (existing societal orders) and present alternative futures (social orders) (see Hillgren et al., 2016, p. 92).

An ‘Indigenised’ design methodology is one in which Indigenous peoples maintain ownership and control over the research and design process. As Bishop (1996) claimed, “Indigenising the narrative corrects the stereotyping and mythologising of the native. It promotes the use of alternative research designs and creative ... formats. It takes ownership of the sociological, cultural, psychological and educative roots of traditional Indigenous ontology and epistemology” (Bishop, 1996, p. 528). ‘Narrative’ here is understood to refer to a particular discourse or theoretical framework through which design practices are conducted, and so Indigenising the narrative implies that Indigenous Australians maintain ownership and control over the research and design process in a way that enables Indigenous peoples to design, develop, and implement policies, programs, and services that affirm Indigenous values.

4.11 Knowledge production in a service design framework

The approach to knowledge production in a service design framework is generative, in the sense that it constitutes an open, experimental (creative), iterative, and ongoing process that promotes the emergence of new knowledge. It is opposed to the mainstream rational and analytical (reductionist) approach used in Indigenous Affairs. Following Zylinska (2014), in “Minimal Ethics for the Anthropocene”, the notion of rationality or reasoning in a service design project may be characterised as a process of making sense or sensing its own making (design outcome) in a framework that is open and flexible and that affirms the emergence of
differences in kind (states of being necessarily unpredictable in advance) (see Zylinska, 2014, p. 16; Flach, 2016, p. 98).

Because experimental design praxis is fundamental to a service design approach and the production of knowledge is taken as emergent (analytically insoluble), it follows that *theoretical shifts are very much practical shifts, in the sense that real-world connections are required to generate new knowledge or states of being (design outcomes or service arrangements)*. In Bryant’s (2010) words, “theoretical shifts aren’t simply about expression or ideas, they aren’t free floating abstract entities. Rather, they require real connections in order to come into existence and are sustained by real connections” (Bryant, 2010). Shifts in the theoretical underpinnings driving the policy and implementation framework—shifts predominantly influenced by praxis—are not only abstract alterations in a theoretical model, but rather shifts in the real world. This is only possible if there is a sufficient amount of feedback between all stages of the design process, from theoretical inputs (‘control functions’), to policy design, muddling through, and implementation.

4.12 *False dichotomy between bottom-up and top-down approaches to design*

It is important to point out that Indigenous Affairs not only finds it difficult to set up the right conditions for genuine coordination and collaboration (engagement and participation) between government departments and officials (as we saw in the whole-of-government approach to Indigenous Affairs), but also between policy ‘experts’ and policy recipients. It follows, then, that an adequate and appropriate engagement framework needs to maximise institutional connectivity, flexibility, and movement while at the same time bridge the structural divide that has been obstructing meaningful participation between bureaucrats and three-dimensional policy subjects.

A large part of the literature responds to the above issue of bureaucratic sclerosis by arguing for a ‘bottom-up’ approach to design and implementation (see OID, 2014, p. 15; OID, 2016, p. 3.18). The argument is that a more ‘horizontal’ engagement framework is established in a bottom-up approach to design, which allows policy subjects to play a more active (collaborative and participatory) role in decision-making processes that lead to policy
outcomes. However, evidence in the literature found that bottom-up approaches to design are problematic insofar as they function according to a vertical (hierarchical) framework, the result of which reinstates fragmentation and inflexibility in organisational and governmental arrangements. Some scholars critique the government’s support for bottom-up approaches to policy design as further reinforcing governmental control and citizen immobilisation (see Pløger, 2004). This is because governments provide citizens with the illusion that they are genuinely participating in decision-making processes and structures, but insofar as design practices operate according to a vertical framework it follows that government officials still have the final say and thus operate according to a power imbalance. Hence, what has been seen as promoting a more ‘democratic’ process of design has in fact only highlighted:

... how empowerment and mobilization of active citizens is not necessarily a way to emancipate people but can be rather seen as a new way of governing and controlling them. For example, the engagement of citizens can seem to be a way to provide opportunities for them to play an active part in forming a future society, but their actual freedom of action is limited or rather governed through norms and obligations towards the surrounding society that are taken for granted and seen as the obvious and only way forward. From this perspective, participation can be seen as a way to strengthen and make existing structures more efficient rather than to invite diversity and voices that could challenge established structures. Pløger [2004] frames it in this way: “The policy makers do not want an empowerment process that can shape a politically transgressive and transformative form of participation, but wish to prove that it is possible to build more efficient institutional forms of governance” (Pløger, 2004, p. 81) (Hillgren et al., 2016, p. 90; see Dahlstedt, 2008; Pløger, 2004).

The freedom of Indigenous Australian policy subjects to play an active part in shaping their own futures has been significantly constrained under the mainstream approach to Indigenous Affairs. In the whole-of-government approach to Indigenous policy, we saw that a bottom-up, community-level approach to engagement (in the form of repeated consultations) only led to a more efficient (‘streamlined’) form of design and implementation within an erroneous framework—a framework in which the voices of Indigenous peoples were not
being heard or having any influence on the design process and policy outcomes. In other words, the whole-of-government experiment was a technocratic approach that desired more efficiency in its application but which ultimately reinforced a theoretical model that was conceptually and methodologically flawed.

To facilitate genuine (meaningful) engagement with Indigenous Australians in the policy design and implementation process, a framework that emancipates Indigenous policy subjects from political and governmental restrictions is required. And the empowerment of Indigenous policy subjects means power relations are equalised, decision-making processes and structures are devolved to Indigenous Australians, and the design and implementation framework allows for co-design processes. However, if the approach is to empower Indigenous peoples and support ‘politically transgressive and transformative forms of participation’ (Pløger, 2004, p. 81), then the design and implementation framework should not be ‘bottom-up’ or ‘top-down’, or some kind of mixture of them, for they both conform to a vertical hierarchy in which erroneous frameworks direct inadequate design practices. As Flach (2016) identified:

> [There is a] growing consensus [in the research literature] that fixed hierarchical [top-down] organizations are too slow, due to the time it takes to accumulate information at a centralized command center and then disseminate instructions out to distributed, front line operators. On the other hand, completely flattened [horizontal] network organizations can be overwhelmed by noise in the communication network that makes it difficult to pull out the information—the signals—essential for observation and control. (Flach, 2016, p. 97)

It was Moran (2016) who criticised ‘top-down’ government frameworks for being too rigid and thus unable to adequately respond to feedback on the ground, but a more horizontal approach under a vertical framework would not solve this problem, as feedback between the two stages of design requires maximum connectivity and communication. Reflecting on the inadequacy of vertical design frameworks, Hunt (2013) concluded that “problems [in the design and implementation of Indigenous policies] are particularly apparent where horizontal coordination across departments and vertical coordination across different levels of government are required to solve complex problems more holistically. This involves devolved
decision making, partnerships and crossing institutional boundaries, recognition of power inequalities as critical, and trust...” (Hunt, 2013, p. 7; see Head, 2007).

We have seen that ‘complex problems’ (highly complex service environments) require a holistic (systems) approach. Hunt (2013) argued that a holistic approach to Indigenous policy has not been possible within a framework that conforms to a vertical, top-down hierarchy. This design approach results in “bureaucratic silos” (Hunt, 2013, p. 7), “power inequalities” (Hunt, 2013, p. 7), and fragmented or piecemeal outcomes. A holistic approach therefore requires an alternative strategy that allows for proper power sharing (devolved decision making), equal partnerships (between officials and departments and policy designers, including policy recipients on the ground), and institutional boundaries to be crossed. If the approach does not allow for this, it will remain fragmented and inflexible and continue to disempower Indigenous peoples.

4.13 Transversal design practices and heterarchical organisations

We have seen that government reports argue that the design approach needs to be open to innovation and creativity. From what we have seen thus far, we could argue that creativity refers to that which allows design participants to equalise power relations, devolve decision making processes and structures, cross institutional boundaries, and design holistically. In this sense, creativity refers to design practices that challenge governmental and organisational structures. As Landry (2008) found in ‘The Creative City: A Toolkit for Urban Innovators’:

[Creativity] is a challenge, when taken seriously, to existing organisational structures, to habitual ways of doing things and to power configurations. It is concerned with enabling, implementing and delivering potential in communities. It means overcoming deeply entrenched obstacles, many of which are in the mind and mindset, including thinking and operating within silos and operating hierarchically in departmental ghettos, or preferring to think in reductionist ways that break opportunities and problems into fragments rather than seeing the holistic and more interconnected picture. (Landry, 2008, p. xlix-l)
It follows from the above that an holistic approach to design requires a framework that challenges existing structural, institutional, and organisational arrangements, and that the approach needs to avoid conforming to either vertical or horizontal frameworks. It also requires enabling experimental (creative) actions that can cross institutional boundaries.

The current Ph.D. project argues that diagonal or ‘transversal’ design practices can satisfy these conditions. As Genosko (2000) pointed out, drawing on the work of Guattari (2000), “[transversality or ‘diagonality’] is anti-top down . . . and not purely horizontal” (Genosko, 2000, p. 82). Transversal design practices aim to cut across horizontal and vertical boundaries to open and maximise communication “between the different levels of organization in an institution” (Genosko, 2000, p. 80). By enabling communication and feedback between “hitherto closed logics and hierarchies” (Genosko, 2000, p. 119), a transversal (service) design framework seeks to maximise institutional connectivity, flexibility, and movement. The organisational ‘arrangements’ and relations between them that ensue from a transversal design framework are non-hierarchical and non-totalising (Rockwell, 2015, p. 28). As Genosko (2000) stated, “[t]o transversalise the organisation of a given institution is a creative act giving rise to subject groups capable of internally generating and directing their own projects, ensuring that organization remains close to the groups themselves, while simultaneously avoiding the slide into bureaucratic sclerosis” (2000, p. 140-141, emphasis added).

It is important to point out that a transversal service design framework is not limited in its application to institutions and organisations, but rather extends to individuals (citizens) and communities. This means that the artificial boundaries between government officials and policy recipients are also crossed to maximise communication and engagement from a more holistic perspective. It is in this light that Guattari (2000) conceived and implemented an experimental research and design technique, entitled, ‘the grid’, in which various professionals (i.e. policy officials) and non-professionals (i.e. policy recipients) work in an institution (i.e. Indigenous Affairs) and rotate tasks to blur identities, thus facilitating insights for change. The task of a policy recipient in a transversal service design framework would therefore share the task of a ‘policy expert’, and vice versa. This would enable a genuine blurring of identities necessary to overcome the divide between experts and non-experts and support co-creation and co-ownership.
The organisations and ‘subject groups’ that systematic transversal design practices give rise to can be theorised as ‘heterarchical organisations’ which resemble “a network or fishnet while hierarchy [is the] form of organisation resembling a pyramid” (Bondarenko, 2007, p. 64). As Crumley (2005) pointed out, a heterarchy denotes “the relation of elements to one another when they are unranked or when they possess the potential for being ranked in a number of different ways” (Crumley, 1995, p. 3). This is important insofar as it allows the locus of control to shift within the organisation and thus maximise fluidity and communication (see Flach, 2016, p. 95). This prevents the organisation from concentrating power or centralising power and operating in a ‘command and control’ framework. Furthermore, a heterarchy “has a high degree of non-equilibrium” (Bondarenko, 2007, p. 62). This connects to the above analysis which pointed out that a metastable system has a high potential to undergo radical transformations and reach new innovative ‘states of being’. Evidence also showed that heterarchical organisations promote more interpersonal face-to-face relations, which in the context of Indigenous Affairs “are of primary ... importance compared to depersonalised and formalised ones” (Bondarenko, 2007, p. 69).
Figure 6. A transversal service design framework with heterarchical organisations

Note: i1 - i2: maximising (face-to-face) communication between different levels of an institution

Note: Circles represent the shifting locus of control in a heterarchical ('fishnet') organisation, thus maximising flexibility and the emergence of self-organised states.
Chapter 5

Rethinking health and wellbeing: a challenge to the teleology of existing design frameworks

5.1 Objective and subjective wellbeing and negative difference

Policies for Indigenous Australians were first designed and implemented in 1972—a year that marked the “modern approach to Indigenous affairs policy” (Altman, Biddle & Hunter, 2004, p. 1). For nearly 200 years prior, between 1788 and 1967, policies and legislation toward Indigenous Australians were “overtly assimilationist, discriminatory, and genocidal” (Dodson, 1997). Following the Australian referendum of 1967, the Commonwealth Government began including (counting) the Indigenous population in the five-yearly Census, starting in 1971. Ever since, data on standard socioeconomic and health indicators such as employment, income, education, and life expectancy have been the principal instrument for developing and evaluating Indigenous policy (Altman et al. 2004, p. 8). The pursuit of statistical equality in socioeconomic status between Indigenous and non-Indigenous Australians “has been the central plank of Indigenous policy of all Australian governments since the early 1970s” (Altman, 2004, p. 39; see Sanders, 1991). The statistical ‘gap’ in Indigenous disadvantage therefore derives from the Census’ comparative data (see Altman et al. 2004, p. 3).

‘Objective wellbeing’ refers to the use of objective measures of standard socioeconomic indicators as a proxy to determine a person’s health and wellbeing. ‘Subjective wellbeing’, on the other hand, is measured using comprehensive self-report studies and refers to a person’s psychological and emotional wellbeing and general life satisfaction (‘quality of life’) (see Kahneman & Krueger, 2006; Layard, 2006). In Indigenous Affairs, objective wellbeing has been the primary way in which to conceptualise wellbeing and thus design and analyse policies. This sole focus on objectively measured, standard socioeconomic variables “is not surprising,” Biddle (2011a) pointed out, “because the focus of much of the [policy] analysis is on explaining the difference between Indigenous and non-Indigenous Australians.
Explaining differences between the two populations necessitates using data that contains both populations and measures that are applicable to both” (Biddle, 2011a, p. 66).

Research showed that Indigenous Australians have consequently been subsumed by a conception of difference that is negative; that is to say, difference from an already fixed framework of socioeconomic indicators that deems Indigenous Australians ‘deficient’ relative to the statistical outcomes found in the non-Indigenous population and thus ‘in need’ of development according to the mainstream (Western liberal) model of economic development (see Altman, Biddle & Hunter, 2004, p. 5; OID, 2014, p. 2.12; Kowal, 2015, p. 35). Conventional socioeconomic indicators construct normative needs and so reflect the desires, values, mores, and practices of the dominant (non-Indigenous) society or culture, towards which it is assumed Indigenous Australians aspire. As Biddle (2011) stated, “policy in Australia is pressuring the Indigenous population to take on mainstream notions of development that are contrary to their individual desires” (Biddle, 2011b, p. 1, emphasis added).

Following Kowal (2015), in her book ‘Trapped in the Gap: Doing Good in Indigenous Australia’, negative difference is a ‘remedial difference’ insofar as Indigenous Australians have a deficit to be ‘remedied’ by the State (see Kowal, 2015, p. 120). Remedial difference is a construction of difference which is ethnocentric and works to “[ensure] the ‘deserving neediness’ of subalterns ...” (Kowal, 2015, p. 122). The mainstream Indigenous Affairs policy framework has therefore manufactured a perceived ‘gap’ based on negative and remedial difference, thus making Indigenous Australians exhibit a ‘lack’ of development (see De Vries, 2007, p. 28).

In the 2014 OID report, it is stated that the government’s policy-making process is based on a framework of indicators that aims to increase (and subsequently measure) the health and wellbeing of Indigenous Australians (see OID, 2014). The indicator framework is comprised of ‘priority outcomes’, standard socioeconomic outcomes such as level of employment, income, education, and health (as measured by physical health and life expectancy) which Indigenous Australians ‘need to improve’, and it is stated that “priority outcomes reflect a vision of how life should be for Indigenous Australians” (OID, 2014, p. 10).

In other words, there exists a particular way of life that lies behind (and is represented by) the indicator framework and it is assumed that “the individual and collective wishes of
Indigenous people neatly map onto ... the priorities of ... [mainstream economic] development or the efforts to ‘close the gap’ [in basic socioeconomic measures]” (Kowal, 2015, p. 121). The assumption is that the cultural desires, values, and practices of Indigenous Australians coincide with the desires, values, and practices of the dominant non-Indigenous culture.

The framework through which government policy in Indigenous Affairs has been designed operates on the Western liberal assumption that a ‘good’ and ‘healthy’ life is comprised of having an adequate (and increasing) income, salaried labour, a high level of Western education (i.e. measured against rates of literacy and numeracy), and “a functional house in a privileged area” (Kowal, 2015, pp. 35, 50). These values are taken as unproblematically ‘normal’, and so assumed by the Australian government to be desired by all Australians, Indigenous or otherwise.

As Guenther, Castle, Raymond and Berschl (2011) concluded in their article ‘Training for employment outcomes in Indigenous contexts: Straddling the space between cultures’, “[t]he values of mainstream culture, which are represented in terms of ‘work ethic’, institutionalised education and training, the importance of material wealth ... and individualism are taken as a ‘normal’. Conversely, Indigenous values are frequently described in terms of abnormality” (Guenther et al., 2011, p. 90). This conclusion is a summary of Briskman’s (2007) findings that what constitutes a ‘good’ and ‘healthy’ life for Indigenous Australians may be fundamentally different to the perspective of mainstream society. As Briskman (2007) discovered, “Indigenous perspectives are frequently marginalised, with Indigenous culture, particularly in terms of its nonmaterial focus, depicted as inferior and primitive” (Briskman, 2007, p. 69, cited in Guenther & Castle, 2011, p. 90).

In an article by Robertson et al. (2005), entitled, ‘Talking-Up Vocational Education and Training for Indigenous Peoples in Australia’, it was similarly argued that Indigenous Australians “appear to be forever struggling against the imposition of particular ways of seeing and understanding indigenous ways, mores and culture that are premised on the worldview and values of non-indigenous persons” (Robertson et al., 2005, p. 135, emphasis added). In the Vocational Education and Training (VET) sector, non-Indigenous peoples are having the final say in policy- and decision-making processes, which compromises what Indigenous peoples actually desire, thus funneling Indigenous desires into a culturally-insensitive framework.
5.2 Going beyond the standard framework of Western liberalism

With respect to the statistical gap or difference in life outcomes between Indigenous and non-Indigenous Australians, Booth and Carroll (2008) found that roughly half of the gap in self-assessed health between Indigenous and other Australians can be explained away by conventional socioeconomic variables (Booth & Carroll, 2008, cited in Biddle, 2011a, p. 5). Indigenous Australians (in 2004–05) were more likely to report poor health than other Australians despite the fact that socioeconomic outcomes (based on a wide range of socioeconomic indicators) were controlled for (see Biddle, 2011a, p. 14). This indicates that socioeconomic status is important for understanding and measuring the difference in unequal life outcomes for Indigenous Australians, but controlling for socioeconomic status alone cannot explain all the difference between the two populations (Biddle, 2011a, p. 13). In other words, “socioeconomic status alone is not the only reason why Indigenous Australians have worse outcomes than their non-Indigenous counterparts” (Biddle, 2011a, p. 18).

Put differently, an analysis of unequal life outcomes using a standard socioeconomic framework fails to account for more than half of the overall ‘gap’ in Indigenous disadvantage. This is a large part of Indigenous life that is simply unaddressed by the framework used by the government to design Indigenous policy. The conclusion reached by numerous researchers (see Green & Minchin, 2014; Grieves, 2009; Biddle, 2011a) is that the policy framework used to improve Indigenous life outcomes requires other, ‘non-socioeconomic’ measures that can account for a more holistic approach to Indigenous notions of development and health and wellbeing. If the government’s sole aim is to ‘close the gap’ in health and wellbeing between the two populations, then the government needs to understand the nature of this gap and how for Indigenous Australians it extends beyond the standard framework of Western liberalism. The gap in disadvantage has to be adequately conceptualised before it can be addressed in policy design and implementation.

A contradiction reveals itself at the heart of the Indigenous policy-design and implementation process, namely that the framework used to improve Indigenous health and wellbeing has been based on a conceptualisation of health and wellbeing derived from a non-Indigenous perspective. Manning, Ambrey and Fleming (2015), in their study ‘Indigenous
Wellbeing in Australia: Evidence from HILDA [The Household, Income and Labour Dynamics in Australia Survey], found that Indigenous policy “remains deeply rooted in improving Indigenous wellbeing ... as it is perceived by the dominant (Western) non-Indigenous culture” (Manning, Ambrey & Fleming, 2015, p. 17).

But insofar as the non-Indigenous culture, with its emphasis on individualism, material wealth, and Western biomedical determinants of health (as reflected in conventional socioeconomic variables), only accounts for roughly half of Indigenous peoples’ self-reported health and wellbeing, it follows that “[t]he use of a non-Indigenous perspective of wellbeing in the design and application of Indigenous policy is fundamentally flawed, as it does not account for Indigenous ways of life. What is needed is an appreciation of Indigenous wellbeing as perceived by the Indigenous population itself” (Manning et al., 2015, p. 17, emphasis added). The assumption made by policy-makers and design researchers is that ‘wellbeing’ can be unproblematically reduced to standard socioeconomic variables (objective wellbeing framed within a Western outlook) and that in meeting the statistical targets set by the Federal government, Indigenous wellbeing will increase (and thus improve) accordingly (Biddle, 2011, pp. 11-12).

However, no evidence has been provided by the government to show that meeting these predetermined targets will improve Indigenous health and wellbeing (see Biddle, 2011a), and this cannot be done insofar as the notion of ‘wellbeing’ is framed within a non-Indigenous framework. It is for this reason that Biddle (2011) concluded that “a major element missing from the government’s policy agenda is a specific, evidence-based link between the targets that have been set and Indigenous wellbeing” (Biddle, 2011, p. 2). For Indigenous policy design, this is “a compelling limitation” (Biddle, 2011c, p. 12). Biddle (2011) further concluded that “the design of Indigenous policy needs to take into account the available evidence on [Indigenous] wellbeing, rather than making assumptions about its determinants” (Biddle, 2011, pp. 18-19, emphasis added). More incisively, Dillon and Westbury (2007) argued that the failure to “acknowledge Indigenous cultural and value frameworks [in the policy design process] condemns policies and programs to failure” (Dillon & Westbury, 2007, cited in Hunt, 2013, p. 8).

Socioeconomic status (along with the mainstream values and norms that are represented by this measure) provides an incomplete account of Indigenous wellbeing (see Biddle, 2011, 2011a, 2011b, 2011c) and successive governments have failed to recognise and
include culturally-distinct notions of Indigenous health and wellbeing in the process of Indigenous policy design. As a result, inequality in self-reported life satisfaction (or quality of life) is higher for Indigenous Australians (see Biddle, 2011, p. 12; Manning, Ambrey & Fleming, 2015, p. 15). In a study on Indigenous socioeconomic outcomes, Biddle (2011) declared that “it is very important to recognise that the data items on the census overlap only partially with the broader notions of wellbeing that indigenous peoples themselves have identified as being important” (Biddle, 2013, p. 14). Similarly, Guenther et al. (2011) claimed that “[mainstream government] statistics say nothing about ... the worldview of Indigenous people, and ... an understanding of that worldview is seldom sought” (Guenther et al., 2011, p. 92).

The unique worldview of Indigenous peoples, made up of specific epistemological, ontological, political, and ethical frameworks, cannot be reduced to the worldview of non-Indigenous Australians, to the values and norms of the dominant society or culture. If the aim of Indigenous policy is to bring about real improvements in Indigenous health and wellbeing then the notion of wellbeing must be understood from an Indigenous perspective and incorporated into the Indigenous Affairs policy-design and implementation process (see Grieves, 2009, p. 50).

5.3 The holistic nature of Indigenous concepts of wellbeing

A review of the literature revealed that the Indigenous concept of wellbeing is broad, complex, and multidimensional. At the outset, it is important to quote the National Aboriginal Health Strategy (NAHSWEP, 1989) regarding the topic of ‘Indigenous health’:

In Aboriginal society there was no word, term or expression for ‘health’ as it is understood in western society. . . . In contemporary terms Aboriginal people are more concerned about the ‘quality of life’. Traditional Aboriginal social systems include a three-dimensional model that provides a blueprint for living. Such a social system is based on inter-relationships between people and land, people and
creator beings, and between people, which ideally stipulate inter-dependence within and between each set of relationships. Aboriginal spirituality was, and is essentially land-centred. (NAHSWP, 1989, cited in Green & Minchin, 2014, p. 3)

The notion of ‘health’ in Western society operates according to a biomedical framework in which the individual physical body is the most important determining factor in improving health outcomes (see Grieves, 2009, p. 43). The human being is abstracted from its social, environmental, and cultural environment (including one’s community and family) and the individual body is treated as the principle site of care. This is reflected in the government’s approach to Indigenous policy, which stipulates that its central concern is to improve Indigenous health and wellbeing by concentrating on individual health outcomes, measured statistically by life expectancy at birth, child mortality, and lifestyle health risk factors (OID, 2014), or by external factors such as employment, income, and housing (conventional socioeconomic indicators). However, “Western and Indigenous concepts of health are fundamentally different” (Johnston & Jacups, 2007, cited in Green & Minchin, 2014, p. 3), and the omission of Indigenous notions of wellbeing from Indigenous Affairs is “[a] major barrier to effective Indigenous health [and thus economic development] policy” (Green & Minchin, 2014, p. 3, emphasis added).

The above quote by NAHSWP (1989) emphasised the holistic nature of Indigenous wellbeing by conceptualising it within a three-dimensional framework, with the relationship between people; people and land; and people, land, and spirituality, as being interrelated and interdependent on each other for improving Indigenous wellbeing or ‘quality of life’. On this point, Warraimay woman Vicki Grieves, in a comprehensive study, entitled, ‘Aboriginal Spirituality: Aboriginal Philosophy, The Basis of Aboriginal Social and Emotional Wellbeing’ (2009), quoted medical anthropologist Janice Reid (1982) who concluded that “[h]ealth, to Aborigines, is not a simple matter of good fortune, a prudent lifestyle or a good diet [as is the case in Western culture]. It is the outcome of a complex interplay between the individual, his territory of conception and his spiritual integrity: his body, his land and his spirit” (Reid, 1982, p. 15-16, cited in Grieves, 2009, p. 43, emphasis added).

Grieves (2009) goes on to quote Judy Atkinson, of the Gnibi College of Indigenous Australian Peoples, who found that the reliance on a biomedical indicator framework to
design policy for Indigenous health and wellbeing “fails to embrace the less easily measured aspects of community living and wellbeing, now deemed to be of prime importance by Aboriginal peoples and public health researchers alike [in improving Indigenous health and wellbeing]” (Atkinson, Graham, Pettit & Lewis, 2002, pp. 286–7, cited in Grieves, 2009, p. 43). These less easily measured aspects include the intangible (the difficult, if not impossible to quantify) social and cultural heritage factors of Indigenous spirituality and wellbeing.

Given the broad and multidimensional nature of the Indigenous concept of health and wellbeing, Green, King and Morrison (2009) claimed that policy and service designers need to “look beyond the limitations of traditional epidemiology and scientific reductionism to embrace a more ecologically focused, social-determinants approach to health” (Green, King & Morrison, 2009, p. 5).

The Indigenous concept of wellbeing needs to be treated holistically, in the sense that it extends beyond the individual body to include other dimensions, namely the land, community life, spirituality, and the ethical relations between them. It should not be theoretically reduced to a narrowly-defined biomedical indicator framework. A bio-psycho-social- and ecological-determinants approach is therefore necessary to address Indigenous notions of health and wellbeing. Evidence revealed that there is a strong connection between an Indigenous person’s self-reported life satisfaction and the health of country (see Green & Minchin, 2014).

As Green and Minchin (2014) stated, it is important “to stress that connections to country cannot be ignored in Indigenous health policy” (Green & Minchin, 2014, p. 3). Historically, Indigenous peoples’ connections to land have been ignored in Indigenous policy, despite the fact that evidence showed this connection to be of vital importance to Indigenous health (see Green & Minchin, 2014, p. 3). “Part of this problem lies in the nature of government policymaking,” Green and Minchin (2012) argued, “[as] problems such as health, community wellbeing and environmental protection are treated in isolation, ignoring the fact that for Aboriginal people in particular, there is a strong relationship between an individual’s health and the health of their community and their country” (Green & Minchin, 2012, p. 642, emphasis added).

In more general terms, economic, social, and environmental issues should not be seen in isolation, as solutions for one can exacerbate effects for another. Components that are interconnected or interlocked do not act independently from each other, and so policy
designers have an obligation to be aware of seemingly unrelated factors that, if ignored, can decrease wellbeing. Designers are responsible for responding to the unique situation or context in which policies are developed and to adapt the policy or service to meet the quadruple-bottom-line approach to development, which refers to cultural, economic, social, and environmental risks and benefits.

The above multidimensional or holistic approach to Indigenous wellbeing focuses on improving outcomes in Indigenous social and emotional health and wellbeing, which includes simultaneous concern for the “[environment, body,] mind, emotion, identity, community and spirit” (Green, 2008, p. 12). As Grieves (2009) declared, Indigenous peoples “become whole selves through their interactions [with multiple dimensions of social, cultural, environmental, and spiritual life and] not apart from them [—as is the case with hermetically-sealed, atomised individuals in a late capitalist society]” (Grieves, 2009, p. 41). Thus, rather than speaking of the ‘subject’ as being reducible to the individual mind and body, we can, following Guattari (2009), speak of ‘components’ (both internal and external) of subjectivation that contribute to a broader understanding of personhood outside the traditional framework of Western scientific reductionism (see Guattari, 2009).

A review of the Indigenous Affairs literature revealed that it largely neglected the issue of Indigenous subjectivity and its relation to subjective (as opposed to objective) wellbeing and policy design. “This is problematic,” Manning, Ambrey and Fleming (2015) concluded, “because many things that matter to Indigenous people—such as family stability, community life, cultural identity and connectedness with country—cannot be measured objectively” (Manning, Ambrey & Fleming 2015, p. 1). For many Indigenous Australians, subjectively measured wellbeing has Indigenous-specific determinants irreducible to a Western approach to health, and extends outwards to include other ‘components of subjectivation’. The most fundamental of these components are shown in the literature to be community life, cultural participation, language maintenance, connections to country, spirituality, and family (see Biddle, 2011).
5.4 The importance of Indigenous spirituality

The multifaceted concept of Indigenous spirituality, as the essence of Indigenous personhood, and one of the main factors influencing Indigenous health and wellbeing, needs to be at the centre of the Indigenous policy, program, and service design and implementation process. As Grieves (2009) concluded:

... [S]olutions that lead to the legitimising, strengthening and promulgation of Aboriginal Spirituality, and notions of personhood from there derived, including collective approaches, are likely to produce real outcomes and enhance wellbeing. ... [Of most importance] is the preferencing of Aboriginal Spirituality at every level of social change policy and program development within governments, as this is crucial to bringing about a heightened Aboriginal social and emotional wellbeing. (Grieves, 2009, p. 50, emphasis added)

Earlier in the study, Grieves (2009) made a crucial point that is worth quoting at length:

[W]ithout deep respect and knowledge of what constitutes Aboriginal wellbeing, the centrality of Spirituality to that concept, and without the cultural basis of Aboriginal understandings of the context of their lives, there is little opportunity for governments, other agencies and Western-educated professionals to work meaningfully with Aboriginal groups in order to bring about appropriate developments, including healing. (Grieves, 2009, p. 38)

With respect to Indigenous and non-Indigenous notions of personhood, anthropologist Gaynor McDonald (2001) claimed that a major problem with policy in the Indigenous Affairs portfolio is that it is designed to turn Indigenous peoples into “a certain kind of Australian citizen” (McDonald, 2001, p. 2, cited in Maddison, 2009, p. 2, emphasis added). The government’s ‘economistic’ ideas of development and progress work to promote, via statistical equality, cultural sameness or homogeneity, and therefore fail to recognise the unique cultural aspirations and dispositions held by Indigenous Australians.
This Western, ‘monocultural’ approach to Indigenous policy-design is what Larissa Behrendt, a Eualeyai-Kamilaroi woman, described as “‘psychological terra nullius’, a worldview that continues to deny the presence, let alone the complexity, of Aboriginal people and political culture [like the original notion of terra nullius, which deemed Indigenous land ‘vacant’ and the lives of Indigenous peoples inferior to non-Indigenous lives]” (Maddison, 2009, p. 122).

Sanders (1991) warned that the “simple pursuit of statistical equality as an embodiment of justice and equity is both inappropriate and undesirable” (Sanders, 1991, p. 15). Numerous authors referred to the Federal government’s Closing the Gap policy framework as promoting assimilationism, or forcing Indigenous peoples into the dominant culture at the expense of what matters most to them (see Altman, 2004; Dockery, 2014, p. 85; Young, 2000, p. 237; O’Faircheallaigh, 2004, 2006). In this light we can understand Grieves’ (2009) conclusion that “[Indigenous] Spirituality, the essence of personhood, inimical to Westernisation, and central to Indigenous identity, remains the last frontier of colonisation and, in a sense, the enduring last stand of Indigenous people in their resistance to the colonisation of their worlds” (Grieves, 2009, p. 17).

5.5 Difference and homogeneity

The first stage of design in Indigenous Affairs, namely policy conceptualisation and development, involves the creation of external ‘solutions’ to Indigenous development within a Western cultural framework that excludes Indigenous difference. Indigenous scholar Kerry Arabena questions:

. . . [if] we [Indigenous peoples] consent to external agencies describing what our future looks like ... then what are Indigenous peoples in Australia consenting to? And, in changing our health status from ‘poor’ to ‘well’ and our economic position from ‘disadvantaged’ to ‘advantaged’, what are Indigenous peoples then obliged to become? And if Indigenous peoples no longer give their consent to being a victim of a the [sic] socio-material system of the dominant society, and
resist being ‘developed’ in order to participate, what choices are available to them? (Arabena, 2006, p. 38)

Arabena (2006) highlights the well-documented tension in Indigenous Affairs between difference and homogeneity (the latter which is represented by ‘statistical equality’ in socioeconomic status). The critical question is whether or not the importance of Indigenous cultural difference is able to be appropriately accommodated in a policy framework that seeks statistical equality, given that this framework implies a certain cultural homogeneity or similar way of being and doing that does not cater for Indigenous peoples’ lifeworlds, desires, aspirations, and needs.

It is for this reason that Kowal (2015) asked the following question: “Can inequality be a chosen expression of difference in some circumstances?” (Kowal, 2015, p. 39, emphasis added). In other words, if the mainstream framework used by governments to design Indigenous policy signifies an inequity in statistical outcomes for Indigenous Australians relative to non-Indigenous Australians, then this could represent an expression of Indigenous cultural difference rather than a so-called deficiency in socioeconomic status. It could express the affirmation of a cultural difference that an inadequate theoretical framework fails to acknowledge and accommodate.

The government’s approach aims to enhance Indigenous wellbeing by seeking improvements (and eventually equal outcomes) in specific socioeconomic and health variables. However, the way in which such notions of health and wellbeing have been conceptualised or framed has not been able to capture Indigenous notions of wellbeing. Indigenous notions are not to be divorced from the unique cultural ways of being and doing that Indigenous peoples desire to exercise to achieve real improvements in their health and wellbeing, which is why Kowal (2015) cautiously stated that “[w]e [Indigenous peoples] might one day have the same health statistics as everyone else but not at the cost of being indistinguishable from non-Aboriginal Australia” (Kowal, 2015, p. 50)—an indistinguishability that could very well mark processes of assimilation and cultural denial.

The tension is therefore “between two competing processes internal to Indigenous affairs: attaining statistical equality . . . and maintaining essential Indigenous
difference . . .” (Kowal, 2015, p. 16). Pearson (2016) similarly highlighted the “opposing and competing [tensions]” (Pearson, 2016, p. 2) that exist in Indigenous Affairs, claiming that the most dominate tensions are those “between ‘top-down’ and ‘bottom-up’ [design and implementation processes], ... between evidence and ideology, between non-Indigenous and Indigenous cultures, [and] between the economic and community aims of development” (Pearson, 2016, p. 2). Pearson (2016) goes on to claim that the resolution of these tensions or opposing principles “lies in their dialectic synthesis not through the absolute triumph of one side of a struggle or a weak compromise” (Pearson, 2016, p. 3). It could be argued that the issue is not about equality *tout court* but rather equality in difference.

The fundamental issue in Indigenous Affairs is how to conceptualise an appropriate design framework that allows for Indigenous difference to be affirmed and maintained. As Altman (2010) argued, “the challenge we all face as anthropologists [concerned with Indigenous policy design] is getting beyond the dominance of a discourse that focuses only on capitalist economy and statistics so we can reintegrate people and different cultural systems into our analyses and interpretations” (Altman, 2010, p. 277).

The theoretical framework used to conceive and design Indigenous policy should not rely solely on equalising standard socioeconomic and health statistics (as represented by Census-based variables), but rather draw on other, more culturally-informed categories (such as Indigenous notions of health and wellbeing), while at the same time challenging the hegemonic assumption that development and progress are notions confined to a neoclassical economic (capitalist or neoliberalist) framework.

The Indigenous Affairs policy framework needs to respond to, and thus support, rather than exclude and undermine, Indigenous peoples’ culturally-informed aspirations, needs, practices, and desires. As Maddison (2009) argued, “[i]t should not be the aim of government policy to change Aboriginal cultural and political values, but rather to be creative in response to these values, to imagine new ways of respecting this aspect of cultural difference within certain policy constraints” (Maddison, 2009, p. 86).

The framework used to conceptualise and design Indigenous policy has been unable to adapt and respond to Indigenous values and alternative ways of thinking, being and doing; the policy constraints (or theoretical boundaries) of the mainstream development discourse and design approach in Indigenous Affairs has not allowed for a *creative* response to different cultural systems. As Maddison (2009) concluded, “the growing influence of neoliberalism in
mainstream Australian politics has placed creative policy solutions [in Indigenous Affairs] under threat” (Maddison, 2009, p. 86).

The hypothesis of the current project is that the upcoming green economy could offer Indigenous Affairs the chance to respond to Indigenous cultural difference in a creative way that respects and celebrates Indigenous values, aspirations, needs and desires; that a green economic discourse can provide policy designers with an opportunity to creatively respond to some of the most significant issues in Indigenous Affairs.

5.6 Indigenous-specific determinants of subjective wellbeing

Evidence revealed that there exists a positive correlation between maintaining or ‘revitalising’ traditional Indigenous languages and increases in subjective wellbeing for Indigenous Australians (see Chandler & Lalonde, 2008; Dockery, 2010; Kickett, 2011). The same is true more broadly for ‘cultural participation’; there exists a positive correlation between maintaining traditional lands, languages, and cultural practices and better outcomes in self-reported health and wellbeing for Indigenous Australians (see Biddle, 2011, p. 18).

Having a stronger cultural attachment (a reasonably strong sense of maintaining one’s traditional land, language, and participating in cultural activities) is associated with having a higher level of subjective wellbeing for Indigenous Australians (see Dockery, 2010). A stronger cultural attachment is also associated with a higher chance of being employed and a higher amount of completed years of post-primary education (see Manning, Ambrey & Fleming, 2015, p. 3).

On the other hand, having a weaker cultural attachment (a weak sense of maintaining one’s traditional land, language, and culture) is associated with having a lower level of subjective wellbeing and a decreased probability of being employed (Manning, Ambrey & Fleming, 2015, p. 3). “This suggests”, Manning, Ambrey and Fleming (2015) concluded, “that the level of self-reported wellbeing of Indigenous Australians may be determined by Indigenous cultural attachment, functioning through factors such as self-esteem, self-efficacy and a positive sense of self-identity” (Manning, Ambrey & Fleming, 2015, p. 3; Dockery, 2010).
With respect to employment and Indigenous wellbeing, evidence suggested that Indigenous Australians have lower levels of subjective wellbeing if their work does not allow for cultural responsibilities, such as maintaining traditional languages, land and culture. It was found that being in a job that does not allow for cultural responsibilities “has an even greater detrimental effect on reported happiness than being in unemployment [for Indigenous Australians]” (Dockery, 2005, p. 331, cited in Biddle, 2011, p. 5). In terms of Indigenous wellbeing, it is therefore the type of job that matters, not one’s employment status. The same goes for social development, namely that “it is the type, not just the level of development that is important [for Indigenous Australians]” (Biddle, 2011, p. 20, emphasis added).

Given the importance of caring for country for Indigenous peoples’ health and wellbeing, Biddle (2011) concluded that, with respect to collective, large-scale social and economic development for Indigenous Australians, developments “that come at the cost of environmental degradation will probably not lead to increases in wellbeing” (Biddle, 2011c, p. 3). Given this, evidence suggested that some Indigenous Australians prefer employment that has little to no impact on the environment. Put differently, if there is an increase in income for Indigenous Australians that comes as a result of environmental degradation, then this increase “will probably not lead to increases in [subjective] wellbeing” (Biddle, 2011c, p. 3).

One of the main limitations of income for Indigenous Australians is that “it matters how that income is generated” (Biddle, 2011c, p. 3, emphasis added). Evidence suggested that unlike the positive correlation between income and subjective wellbeing for non-Indigenous Australians (which is limited to a modest threshold after which increased income adds little to no improvement to subjective measures of wellbeing), income for many Indigenous Australians is not positively associated with subjective wellbeing and overall life satisfaction (Manning, Ambrey & Fleming, 2015, p. 3, 16). “[A] possible explanation may be”, Manning, Ambrey and Fleming (2015) argued, with corroboration from Dockery (2010), “that activities that disconnect the individual from their community and culture (e.g. living in an urban centre, attracted by the prospect of gainful employment) have the potential to reduce life satisfaction—a reduction that is not adequately compensated for by higher income” (Manning, Ambrey & Fleming, 2015, p. 16, emphasis added).

We have seen that standard socioeconomic factors used by the government to conceptualise and design Indigenous policy failed to account for roughly half of the so-called
‘gap’ or difference in life outcomes relative to all other Australians. In light of the above, it follows that the other half of this difference is very likely made up of various dimensions of health and wellbeing that are deemed important from an Indigenous perspective: spirituality, personhood (identity), language maintenance, cultural participation, caring for country (which involves the use of traditional knowledges and practices) and connecting with community and family.

We can therefore make sense of the following conclusion reached by Biddle (2011c) that “government policy that solely aims to improve income or some other measure of socioeconomic status, or a policy that is evaluated using socioeconomic status as a proxy [for determining and measuring improvements in Indigenous health and wellbeing] may not lead to sustained improvements in [Indigenous health and] wellbeing and may even have unintended negative consequences“ (Biddle, 2011c, p. 3, emphasis added). More specifically, with respect to the Federal government’s Closing the Gap policy framework, Biddle (2011c) stated that it is erroneous to assume that in meeting these policy targets set by the Council of Australian Governments (COAG) (which we have seen derive from standard socioeconomic measures) that increases in Indigenous wellbeing will necessarily ensue. Indeed, in attempting to meet these targets, governments could very well produce negative or “perverse effects [for Indigenous wellbeing]” (Biddle, 2011c, pp. 12-13).

The relationship between Indigenous health and wellbeing and normative measures of socioeconomic status is a weak one, and a framework operating according to the latter has a “strong potential” (Biddle, 2011c, p. 13) to cause negative outcomes for Indigenous Australians. This conclusion was reached by Manning, Ambrey and Fleming (2015) when they stated that “Indigenous life satisfaction declined sharply between 2003 and 2012. This decline is despite significant investment by all levels of Australian government in addressing Indigenous disadvantage and suggests that existing policies are having little effect” (Manning, Ambrey & Fleming, 2015, p. 15).

It could be said that socioeconomic status is a necessary, but not sufficient, condition to bring about real (sustainable) improvements to the health and wellbeing of Indigenous Australians, but that insofar as governments attempt to design Indigenous policies according to a narrow (inadequately theorised) framework, then Indigenous life satisfaction is unlikely to significantly improve.
Given this, Green and Minchin (2014) highlighted an urgent need for more research to understand how policies designed for Indigenous Australians “can unintentionally affect [Indigenous] health and well-being” (Green & Minchin, 2014, p. 6). Similarly, but more specific to the biomedical approach to health, Grieves (2009) found that “Western systems of diagnostic and treatment practices are normative and, in fact, may be retrogressive to the health and wellbeing of Aboriginal communities” (Grieves, 2009, p. 45). Western systems of diagnostic and treatment practices are epistemologically and ontologically inadequate when it comes to understanding and treating the complex and holistic notion of Indigenous health and wellbeing. The reductionist, psychobiological approach to Indigenous mental health, for instance, is largely flawed. As Phillips (2001) argued, “[s]omething much more radical is required [to approach the area of Indigenous mental health]—something, which simultaneously decolonises Indigenous experience of the biomedical system and develops a complete theoretical base for new [mental health] programs is required. At issue here is our beliefs about medicine, healing, sickness and how culture mediates those beliefs and explanatory [or epistemological] models” (Phillips, 2001, p. 11, cited in Grieves, 2009, p. 46).

Reser (1991) declared that the area of Aboriginal mental health has been significantly neglected and “straight jacketed by prior and totally inadequate frameworks for understanding the other-culture realities of Aboriginal mental health” (Reser, 1991, pp. 220–1, cited in Grieves, 2009, p. 2). This is significant, as Green and Minchin (2014) concluded that mental health illness is one of the “leading driver[s] for the observed health gap between Indigenous and non-Indigenous Australians” (Green & Minchin, 2014, p. 2; see Appendices).
We have seen that the notion of disadvantage in Indigenous Affairs referred to a statistical difference in socioeconomic outcomes between Indigenous and all other (non-Indigenous) Australians. This socioeconomic difference (or ‘gap’) between the two populations shows an inequality in life outcomes for Indigenous Australians. The principal factors driving improvements in socioeconomic status are those that relate to an increase in levels of education, training, employment and income, factors that ultimately determine entry into the labour market. Thus it is appropriate to assume that access to an adequate amount of education and training can enhance a person’s knowledge and skills (referred to by sociologists as ‘human capital’), and that over time, said person will produce personal economic value which can be sold in the marketplace in exchange for material returns. In other words, it is in the interest of the economy to equalise access to education and training.

Addressing Indigenous disadvantage is therefore a matter of increasing Indigenous Australians’ human capital to facilitate entry into the labour market, which over time will increase their levels of socioeconomic status and represent an equity in life outcomes relative to non-Indigenous Australians. According to this analysis, Indigenous disadvantage is the result of a deficiency in human capital relative to all other Australians, and that with the right amount of education and training the gap in socioeconomic status between Indigenous and non-Indigenous Australians can eventually close (see Boughton, 1998).

Indigenous Australians’ low labour force participation rates are seen to be the result of a lack of human capital and that in order to remove the barriers to labour market participation Indigenous Australians need to increase their stock of knowledge and skills (Boughton, 1998). The assumption is that Indigenous disadvantage can be mitigated, if not overcome, if Indigenous Australians simply possess the “same ‘skills’ or ‘qualifications’ profile as exists in non-Aboriginal society ... [as this will lead Indigenous Australians to] also enjoy the same rates of employment and the same rates of income” (Boughton, 1998, p. 14).

The assumption that underpins human capital theory is that increases in human capital follow from significant government investments in private and public resources such as education and training, and these investments will eventuate in tangible returns to the economy and society, principally in the form of increased productivity, income, and consumption (see Schwab, 1997, p. 7). The government therefore invests an extensive amount
of resources to develop and implement Indigenous-focused programs and services to increase Indigenous human capital, and in doing so the government seeks a return on investment in the form of increased employment (productivity), income (consumption) and economic activity in general (see OID, 2014).

A failure in policy outcomes in Indigenous Affairs is often interpreted as an investment that has produced poor rates of return, economically speaking. This can be seen in the conclusion reached by the Department of Finance and Deregulation’s ‘Strategic Review of Indigenous Expenditure’, which, after reviewing a government investment of $3.5 billion that was allocated to the development and implementation of Indigenous-specific services and programs, stated that “this major investment, maintained over many years, has yielded dismally poor returns to date” (DFD, 2010, cited in Moran, 2016, p. 4).

The government, and by extension Indigenous Affairs, operates according to the assumption that investments work to increase Indigenous human capital so that they themselves can become “an attractive ‘investment’ for the employer” (Boughton, 1998, p. 9), the ultimate aim of which is to facilitate the entry of Indigenous Australians into the mainstream labour market and increase their socioeconomic status. As Lawrence (2005) argued, the government’s aim is to produce “neoliberal and ‘job ready’ subjects” (Lawrence, 2005, p. 40), economic actors who build up individual capacities to become employable and who are concerned primarily with their private rates of return on the market (Schwab, 1997, p. 15).

The assumption is that Indigenous peoples’ development and cultural desires, needs, aspirations and practices conform to rational choice theory (a theoretical framework that has placed individual economic activity at the centre of social action). These economic actors are conceptualised as self-serving individuals who pursue their interests in the marketplace for material benefit, and thus continually calculate their private rates of return (Schwab, 1997, p. 15). A strong emphasis is put on the responsibility of the individual to develop his or her own human capital and then compete in the market place. This ‘entrepreneurial self’ in neoliberalist ideology is expected to manage his or her life by making ‘rational’ choices that maximise his or her competitive advantage in the market place (see Mehan, 2014, p. 263).

The fundamental problem with the above theoretical framework (human capital and rational choice) is that it has assumed that what Indigenous Australians actually need and desire can be met and satisfied by the educational and training programs on offer by the
market as a whole, and that if governments invest the right amount of resources into facilitating entry into the mainstream labour market, via education and employment programs and services, then Indigenous peoples can satisfy their needs just like all other (non-Indigenous) Australians. But as we have seen, what is on offer by the mainstream labour market, and by extension the education and training programs and services, fails to truly address what is of most concern to Indigenous Australians, namely the need to revitalise and maintain their cultural practices and ways of life, which evidence has indicated positively effects Indigenous peoples’ health and wellbeing.

Entry into the mainstream labour market can therefore be seen as entry into a system that does not accommodate for what is of most concern to Indigenous Australians, namely Indigenous notions of sustainable cultural development.

It is important to point out that the Indigenous Affairs literature showed that despite the neoclassical economics assumption that individual economic agents are ‘free’ to choose what they want in the market economy, it does not follow that the mainstream economy provides Indigenous Australians with the chance to exercise genuine self-determination. The mainstream economy functions according to a framework that does not accommodate Indigenous lifeworlds, or the possibility of satisfying their culturally-unique needs, desires and aspirations. Under neoliberal capitalism, there exists only a freedom to participate in a socio-cultural system that undermines non-economic values like community and spirituality and instead protects irresponsibility (both collective and individual), and fuels environmental destruction and cultural disconnection (see Altman & Rowse, 2005, p. 176; Arabena, 2006, p. 38; see Appendices).

5.8 A systemic lack of opportunity in the market for culturally-appropriate economic participation

The economic activity that the mainstream education and training institutions offer has not provided Indigenous peoples with the chance to fulfil their most important cultural needs. As one former government official stated, “[t]hey [government policy developers and service and program designers] should be redeveloping the [VET] curriculum [to] make sure it suits
Indigenous people. If Aboriginal people don’t see anything in the training that is about them, they are going to move on [withdraw from the course]” (Robertson et al., 2005, p. 134).

A former Indigenous VET manager similarly stated that “We [Indigenous managers] are always struggling to get through an education and training system that criteria and assessments that many of our people can’t meet and that does not meet the needs of our people” (Robertson et al., 2005, p. 134, emphasis added). In a 2008 article, entitled, ‘Training for employment outcomes in Indigenous contexts: Straddling the space between cultures’, Guenther et al. (2008) found that “programs developed for Indigenous contexts often tend to make assumptions about what ‘whitefellas’ think is important for ‘blackfellas’—for example in terms of education, health, employment and justice—rather than the other way round. Very rarely are Indigenous views about what is important taken into account in education programs” (Guenther et al., 2008, p. 90; see Trudgen 2000).

It is for this reason that Boughton (1998) argued that economic disadvantage among Indigenous Australians is not due to a simple deficit in Indigenous ‘human capital’, but rather to the lack of public or private sector support for alternative Indigenous development pathways or models, or alternative forms of economic and social organisation and activity (Boughton, 1998, p. 1). The reason for disadvantage cannot be identified as the result of non-participation in mainstream education and training programs per se (and the ensuing lack of human capital), but rather it is “the mainstream [that] is defined as ‘the problem’, and indigenous peoples’ non-participation taken as a measure of the system’s lack of relevance to the development needs and aspirations of their communities” (Boughton, 1998, p. 7, emphasis added).

In other words, insofar as Indigenous policy fails to meet the cultural and development needs and aspirations of Indigenous Australians, the problem of Indigenous economic disadvantage (as measured by low labour force participation rates) could be the result of a systemic lack of opportunity in the market (and by extension in the mainstream education and training system) for culturally-appropriate economic participation, which the green economy could respond to. It could be said that Indigenous peoples do not simply desire to acquire the same skills or qualifications profile as exists in non-Indigenous Australia to enter the mainstream labour force in search of private rates of material return, but rather, a form of economic participation that is able to provide Indigenous peoples with the opportunity to fulfil their cultural and development needs and aspirations.
Schwab (1997) found that “[t]he decisions pertaining to education by indigenous peoples may have much less to do with individual calculation of private rates of return than with individual calculations of cultural costs” (Schwab, 1997, p. 15, cited in Boughton, 1998, p. 10). As discussed above with respect to Indigenous subjective wellbeing and employment, many Indigenous Australians have lower levels of wellbeing if their work does not allow for cultural participation, and that being in a job that does not allow for cultural participation had a greater negative effect on subjective wellbeing than being unemployed (see Biddle, 2011). Hence, in terms of cultural costs, it is the type of job that is important, not simply one’s employment status.

5.9 Affirming Indigenous cultural capital

Evidence indicated that Indigenous Australians are interested in developing a particular ‘cultural capital’ the possibility of which has not been on offer by mainstream education and training providers. According to Boughton (1998), such a finding “is another way of describing the fact that indigenous communities often have very different value systems from those of the dominant society, value systems which conflict with the expectations of mainstream education providers” (Boughton, 1998, p. 11). In this light, we can understand Schwab’s (1997) argument that, from the perspective of mainstream (non-Indigenous) culture, Indigenous Australians have lower rates of participation in education and training (and by extension in the mainstream labour market), because “indigenous people do not so much lack ‘human capital’ as the ‘right’ kind of ‘cultural capital’” (Boughton, 1998, p. 11; see Schwab, 1997).

The dominant (non-Indigenous) society demands that Indigenous peoples adopt an entirely different cultural framework made up of a value system largely at odds with their own, to gain employment by participating in a culture that does not provide sufficient means to fulfil what is of most importance to them. The dominant society perceives Indigenous Australians as lacking the ‘right’ kind of cultural capital, that is to say, the determination to participate in a culture framed by a capitalist development discourse.
The value system that frames the Indigenous notion of cultural capital is entirely different to the value system that frames the non-Indigenous notion of human capital.

Because mainstream education and training providers have ignored Indigenous cultural capital, Boughton (1998) importantly pointed out that “[governments] providing more subsidies to private employers, or to VET providers, to expand their offerings to Aboriginal people across the full range of mainstream courses and qualifications is unlikely to lead to the outcomes intended [mitigating economic disadvantage], because it does not accord with [Indigenous] peoples’ aspirations and needs” (Boughton, 1998, p. 10). The form of economic activity that mainstream education and training providers offer Indigenous peoples has been a form of activity that culturally influences Indigenous peoples. As Altman and Rowse (2005) claimed, “[t]his [mainstream economistic] approach [to Indigenous policy] ignores a point made by anthropology: that to change peoples’ forms of economic activity is to transform them culturally” (Altman & Rowse, 2005, p. 176, cited in Scambary, 2009, p. 180).

It is worth noting that culture is a necessary but not sufficient condition for designing effective policies, programs and services in Indigenous affairs; the main point is that cultural concerns need to be creatively integrated into the design framework, and by acknowledging and incorporating the point made by anthropology into the policy design framework, Indigenous policy needs to develop forms of economic activity that affirm rather than deny the development of Indigenous cultural capital; forms of economic activity that emphasise “the cultural imperatives of Indigenous economic agency” (Scambary, 2009, p. 180).

5.10  Green economic activity that affirms Indigenous cultural capital

The hypothesis of the current research project is that the emerging green economy shows potential for providing Indigenous Australians with forms of economic activity that do not seek to transform Indigenous peoples culturally, but rather affirm and maintain the development of Indigenous cultural capital. The economic activity that is undertaken in a green economy has the capacity to support and sustain, rather than ignore and undermine, Indigenous peoples’ culturally-informed needs and aspirations. Such a project was described by the Aboriginal and Torres Strait Islander Education Policy (AEP) Taskforce in 1988 as “the
most challenging issue of all [in Indigenous Affairs]” (AEP, 1988, p. 2, cited in Boughton, 1998, p. 29). That is to say, the most challenging issue in Indigenous Affairs is to ensure that education and training (and employment) is available to all Indigenous peoples “in a manner that reinforces rather than suppresses their unique cultural identity. The imposition on Aboriginal people of an education [and training] system developed to meet the needs of the majority cultural group does not achieve this” (AEP, 1988, p. 2, cited in Boughton, 1998, p. 29, emphasis added). As a result of the above findings, there is a need for policy researchers and designers to identify and appropriately develop “alternative pathways into education, training and employment which are consistent with [Indigenous Australians’] own development aspirations” (Boughton, 1998, p. 29, emphasis added; see Hunt, 2013; Altman, 2009).

For policy-makers and service and program designers, the key question is therefore how to appropriately match education and training offerings (strategies) to the cultural and development needs and aspirations of Indigenous Australians (see Boughton, 1998, p. 18). The failure of researchers, designers, and policy-makers to address this question has, according to Boughton (1998), led to “an inappropriate and therefore ineffective policy focus on maximising places in mainstream courses and programs, with little evidence to suggest that even if these places are filled, the education and training will translate into sustainable employment outcomes and [Indigenous] community development” (Boughton, 1998, p. 30, emphasis added).

The framework used to conceptualise, design, and implement Indigenous policy has attempted to address Indigenous economic disadvantage by duplicating the same approach used in the “urban-based mainstream Australian economic and social structure ... [However, as evidence indicated,] Indigenous peoples ... need a different set of education and training pathways, which may well include ‘mainstream’ options, but whose fundamental characteristics are their close fit with locally and regionally determined indigenous development needs” (Boughton, 1998, p. 30).

This touches on a common finding in the Indigenous Affairs literature, namely that equity of service does not necessarily translate into equity of impact or outcome; the outcomes desired by many Indigenous Australians (i.e. sustainable development according to Indigenous values) are outcomes that are unlikely to be realised if the same theoretical framework used in non-Indigenous policy has been uncritically applied to Indigenous Affairs.
Evidence indicated that Indigenous health and wellbeing is likely to be negatively impacted if the same ‘one-size-fits-all’ approach is operationalised.

Evidence in the literature also showed that if policy-makers adopt an alternative theoretical framework that values Indigenous needs and aspirations, then what was once categorised as a ‘deficit’ (according to the conventional framework) can become a ‘plus’ in an alternative framework (see Taylor & Jin, 1996; Rowse, 1997, p. 132; OID, 2016, p. 2.12).

In matching education and employment strategies to the needs and aspirations of Indigenous Australians, policy-makers can shift from a deficit-based approach to a strengths-based approach to Indigenous Affairs; an approach that aims to build on existing strengths in the form of culturally derived skills, ideas, knowledges, practices and capacities (see Boughton, 1998, p. 11). This would mark a significant shift in emphasis from drawing on mainstream, economistic conceptions of ‘human capital’ framed within a neoliberal capitalist system, to working with Indigenous notions of cultural capital in a green economic policy context.

A strengths-based approach to development is also known as an ‘asset-based development’ (see Kretzmann & McKnight, 1993, p. 6; Hyatt, 2011, p. 65). This is an approach to social and economic policy-making that encourages individuals and communities to look within to find skills, knowledge, ideas and capacities to develop and strengthen. It is an internally-focused approach opposed to that which defines development according to an external framework comprised of external determinants (such as standard socioeconomic variables), with the values and norms that this framework implicitly encourages people to adopt.

Although an internally-focused approach values determinants that derive from within and thus seeks to accommodate the particularity of speaking subjects, this approach is not purely individualistic; it is often situated within a specific community context and is thus predominantly relationship-driven (Rans, 2005, p. 2, cited in Hyatt, 2011, p. 67). Community relationships, or an individual’s relationship to his or her community, is crucial in Indigenous Affairs, and the ability to find preexisting strengths to build on within a framework that values Indigenous needs and aspirations is likely to promote a more appropriate form of social, cultural, and economic development.
5.11 Development discourse and integrating economic activity with Indigenous values

Of crucial importance to Indigenous Australians’ health and wellbeing are the traditional relationships to land that Indigenous cultures have had for more than forty thousand years (see Maddison, 2009). Researchers point out that the literature often characterises Indigenous relationships to country as constituting a problematic dynamic in the process of contemporary economic development (see Maddison, 2009). Government reports often assumed that traditional relationships to land act to hinder rather than promote economic development, as they supposedly fall outside a modern capitalist system. Indigenous and non-Indigenous models of economic development are perceived to be mutually exclusive and thus irreconcilable. Dodson and Smith (2003) pointed out that government reports often assume that Indigenous cultural values are “at odds with western ideas of capitalism and the market place [and that Indigenous Australians are opposed to development under this framework] because it undermines their culturally based behaviours and values” (Dodson & Smith, 2003, p. 6, cited in Maddison, 2009, p. 74).

A significant amount of evidence in the literature indicated that a specifically neoliberalist development framework, or “socio-economic order” (Scott & Durey, 2014, p. 259) is at odds with Indigenous cultural values, development needs, and aspirations (see O’Faircheallaigh, 2008; Altman, 2009; Appendices). Neoliberal capitalism’s relationship to land, or the natural environment, has been premised on the unregulated exploitation of non-renewable natural resources, which has degraded or destroyed more than 60% of the planet’s ecosystems (see Millennium Ecosystem Assessment [MEA], 2005, p. 1). As Heynen, McCarthy, Prudham and Robbins (2007) discovered, there exists a significant amount of empirical evidence suggesting that the effects of neoliberal policies on environmental governance and quality has predominately been ecologically harmful (see Heynen et al., 2007, p. 2). Since the 1970s, neoliberal policies have led to such large-scale environmental degradation that many researchers claimed the global economy is exhibiting a strong tendency to “undermine the ecological conditions of its own reproduction” (McCarthy, 2007, p. 39).

A provisional analysis allows us to point out that given Indigenous relationships to land are so crucial to Indigenous health and wellbeing and that Indigenous cultural
development requires a respectful and sustainable relationship to the natural environment, that Indigenous cultural values are largely at odds with neoliberal capitalism. However, this does not necessarily imply that Indigenous cultural values and practices are categorically at odds with ‘contemporary economic development’. To assume that economic development needs to conform to a neoliberal economic framework is to set up a false dichotomy between Indigenous development and Western development, or an inappropriate theoretical framework that ignores, rather than recognises and respects, Indigenous notions of sustainable development.

Maddison (2009) argued that “[i]t should not be the aim of government policy to change Aboriginal cultural and political values, but rather to be creative in response to these values, to imagine new ways of respecting this aspect of cultural difference within certain policy constraints” (Maddison, 2009, p. 86). The policy constraints (theoretical design boundaries) of the mainstream approach to Indigenous Affairs needs to allow for a creative response to different cultural systems and needs. As it stands, the mainstream approach has set up a false dichotomy between ‘traditional’ Indigenous development and ‘modern’ Western development frameworks, a binary that acts to further suppress and marginalise Indigenous peoples’ needs and aspirations. As Scott and Durey (2011) discovered, Indigenous views about development are too often “relegated to a subordinate discourse that has great difficulty being heard” (Scott & Durey, 2011, p. 260; see Altman, 2009). Maddison (2009) concluded that “the growing influence of neoliberalism in mainstream Australian politics has placed creative policy solutions under threat” (Maddison, 2009, p. 86).

Evidence in the literature suggested that policy-makers and designers should not assume that it is possible to seriously address and accommodate Indigenous development needs and aspirations within a neoliberal economic policy context. If policy-designers aim to respond adequately to Indigenous cultural values and needs, then the theoretical framework used to design Indigenous policy needs to avoid assuming that contemporary forms of economic development are unable to accommodate for Indigenous needs and aspirations, but instead respond creatively to them.

As Maddison (2009) concluded, “[l]egislation and policy that do not come to grips with the real complexity of Indigenous culture, and that instead rely on outmoded frameworks of ‘the traditional’, will have the effect of constraining rather than advancing [Indigenous] economic development” (Maddison, 2009, p. 74). Researchers, designers and policy-makers
have largely ignored the diversity and complexity of Indigenous notions of sustainable development and the question of how such notions could creatively link with contemporary models of economic development outside a neoliberal economic policy context (see Altman, 2013). As Maddison (2009) argued, the relationships to land that Indigenous peoples have and wish to exercise “tend to be poorly understood by non-Aboriginal people who either romanticise Aboriginal culture as some sort of universal, anti-capitalistic spirituality or deride its significance as primitive, anti-development ignorance” (Maddison, 2009, pp. 73-74).

The Indigenous Affairs literature indicated that many Indigenous Australians desire social and economic development that maintains Indigenous cultural values. As Maddison (2009) found, Indigenous Australians “are deeply interested in options for [culturally appropriate] economic development” (Maddison, 2009, p. 79; see Cronin, 2003, p. 159). Maddison (2009) also discovered that “there is widespread recognition among Aboriginal leaders and activists that improving economic well-being and creating greater capacity for economic development are urgent tasks [in Indigenous Affairs]” (Maddison, 2009, p. 63, emphasis added). ‘Economic wellbeing’ refers to sustainable forms of economic activity that affirm and sustain Indigenous cultural values and practices—a type of sustainable economic development relevant to Indigenous peoples’ needs and aspirations that can facilitate economic independence. Maddison (2009), citing the work of Aboriginal elder Tom Calma, pointed out that “sustainable economic development is essential for [Indigenous] wellbeing ‘now and into the future’” (Maddison, 2009, p. 64; see Aboriginal and Torres Strait Islander Social Justice Commissioner [ATSISJC], 2007, p. 1). Hence, “[i]ntegrating new forms of economic activity with [Indigenous] social concerns and cultural priorities ... is one of the greatest challenges facing Indigenous people today . . . Getting the balance right will be central to achieving real self-determination” (Maddison, 2009, p. 74, emphasis added).
5.12 Challenging the hegemonic development discourse with community development and control in peri-urban and inner regional Australia

The above analysis enables us to hypothesise that if green jobs and the Indigenous Affairs policy design framework are adequately theorised and implemented, then the ‘right’ balance between economic development and the ability to maintain Indigenous needs and aspirations could be achieved, the result of which leads to Indigenous Australians achieving ‘real self-determination’.

With respect to the notion of Indigenous self-determination, the literature showed that the mainstream framework used to design and implement Indigenous policy has been inadequately theorised and thus largely failed to provide Indigenous Australians with the right conditions for achieving economic, social and cultural self-determination. It is for this reason that Maddison (2009) argued that there has been a “profound lack of self-determination at the heart of policies ostensibly espousing self-determination . . .” (Maddison, 2009, p. 28). The conclusion drawn is that this hegemonic design framework needs to be challenged to provide Indigenous Australians with a real chance of achieving self-determination. As Maddison (2009) pointed out, “[n]o Australian government has ever been prepared to unsettle the status quo sufficiently to afford Aboriginal people real autonomy” (Maddison, 2009, pp. 24-25, emphasis added). Similarly, Lea (2008) argued that for policy-makers to challenge the dominant discourse driving Indigenous Affairs they need to be “unburdened by the odor of sanctity” (Lea, 2008, p. 83).

It is in response to the demand for policy-makers to challenge the status quo that Altman (2010) declared the following: “I want to challenge this increasingly dominant discursive framing of [Indigenous] development policy [by] arguing for a fundamentally different approach that can encompass a wider set of economic forms and intercultural values” (Altman, 2010, p. 263). Altman (2010) argued that the dominant theoretical discourse underpinning the government’s approach to Indigenous Affairs (or Indigenous development policy) needs to be replaced by a fundamentally different framework that can generate new forms of economic activity relevant to Indigenous cultural needs and values—an approach that is based on a framework that allows policy-makers to creatively respond to Indigenous needs and aspirations by developing new forms of economic activity.
The approach proposed by Altman is termed the ‘hybrid economy model’ (Russell, 2011, p. 1). It is an Indigenous-specific policy development framework that aims to validate and legitimise the ‘customary’ sector of the economy and integrate it with the traditional “two sector conceptualisation of the economy (market/private and state/public)” (Russell, 2011, p. 1). As a third economic sector, the customary economy seeks to recognise non-monetised activities that have traditionally been exercised by Indigenous peoples in ‘remote’ and ‘regional’ Australia, activities that are productive and life-sustaining and that “reaffirm dynamic Indigenous connections to country and ways of being” (Russell, 2011, p. 1). Altman’s economic model has done a great deal to support sustainable economic activities proven to “enhance Indigenous wellbeing” (Altman, 2006, p. 10, cited in Maddison, 2009, p. 72; see Green & Minchin, 2014), and it has been operationalised in outer regional, remote and very remote Australia to generate “a more sympathetic response from the Australian state [to] see value in Aboriginal contributions and ways of being” (Altman, 2010, p. 263). As Maddison (2009) said, Altman’s hybrid economic model ultimately proposes a paradigm shift that “actively supports and lauds Indigenous participation in eco-services provision and forms of market engagement ... that are not only sustainable but would enhance Indigenous wellbeing” (Altman, 2006, p. 10, cited in Maddison, 2009, p. 72).

However, research in the literature pointed out that the application of Altman’s hybrid economic model has been limited to areas in Australia where Indigenous Australians can expand their economic base by drawing on traditional practices, areas principally in rural, remote and very remote Australia (Green & Minchin, 2012, p. 642; Martin, 2003). In contrast, this project focused on two geographical areas in Australia largely neglected in Indigenous Affairs, namely peri-urban (rural-urban interface) and inner regional environments. As Hunt (2014) discovered, Indigenous Australians “have not featured strongly in the literature or policies relating to regional development; nor has regional, rather than remote, development been a strong theme in the literature on Indigenous Australia” (Hunt, 2015, p. 115). Similarly, Maddison (2009), drawing on the work of Eualeyai–Kamilaroi academic and writer, Larissa Behrendt, pointed out that “[m]uch of the debate about economic development for Aboriginal people remains focused on the extreme poverty of some remote communities. However, … development is needed in urban areas as well, where Aboriginal people still find themselves excluded from the ‘mainstream’ of economic life” (Maddison, 2009, p. 66). Clark, de Costa and Maddison (2016), in reference to Altman’s framework, concluded that “land and hybrid
economies may offer little for urban Indigenous peoples” (Clark, de Costa & Maddison, 2016, p. 9). This is significant as roughly 53% of Indigenous Australians live in urban, peri-urban and inner regional areas (approximately 241,164 people) (ABS, 2007).

With its focus on a green economic policy context, this project seeks to expand on the general idea of Altman’s hybrid economic model by arguing for a paradigm shift in Indigenous Affairs that seriously respects and values Indigenous development needs and aspirations, and which focuses on Indigenous-specific determinants of health and wellbeing. However, within a peri-urban and inner regional context, the notion of ‘eco-services’ gains a much more significant role, as it extends beyond the limitations of the customary sector to include new and sustainable forms of ‘mainstream’ economic activity and market engagement for Indigenous Australians in the upcoming green economy.

The literature pointed out that alternative design frameworks are neither being designed nor operationalised in urban fringes and inner regional Australia despite mounting evidence showing that these environments support the design of sustainable, place-based economies that are “sympathetic with nature” (Ghosh, 2014, p. 143) and social, cultural and community development and control. The green economic peri-urban and inner regional development model has also been shown to require “high levels of local participation and ownership” (Simon & Adam-Bradford, 2014, p. 376).
6.1  Failure of the non-renewable resource sector to provide Indigenous Australians with sustainable and culturally-appropriate economic options

Facilitating Indigenous entry into the ‘brown’ economy—the non-renewable resources industry (principally mining sector)—in WA (previously one of the State’s largest employment generators) has contributed little to overcoming Indigenous economic disadvantage.

As WA experienced one of the largest ‘mining booms’ in the nation’s history, the gap in Indigenous labour market disadvantage widened (see Dockery, 2014), and the resources sector’s growth was accompanied by strong employment growth. In WA, mining employment increased by 93% over the four-year period between 1999 and 2003, and by 138% over the ten-year period between 2003 and 2013 (The Department of Training and Workforce Development [DTWD], 2010, p. 2; Department of Mines and Petroleum [DMP], 2014, p. 1). In 2011-2012, WA’s employment growth rate was “the highest of all States, over 3.5 times above the national rate, meaning the State was responsible for ... over 40% of the nation’s total jobs growth” (DTWD, 2012, p. 2). In 2012, over 100,000 people in WA were employed by the mining and petroleum industry (Brueckner et al., 2014, p. 12).

However, Dockery (2014) found that in 2011, for every 100 mining jobs in outer regional WA only 3.9 Indigenous residents were employed, and a further 11.3 were unemployed, and for every 100 mining jobs in remote and very remote WA only 4.6 Indigenous residents were employed, and a further 4.6 were unemployed (Dockery, 2014, p. 86). In three specific mining-intensive areas in outer regional and remote WA, namely Yalgoo, Wiluna and Coolgardie, Dockery (2014) discovered that the Indigenous unemployment rate did not change over the 20-year period between 1991 and 2011 (Dockery, 2014, p. 82). Despite the mining industry comprising 73% of jobs in Yalgoo, the unemployment rate for
local Indigenous residents stood at 33%. In Wiluna, where 54% of jobs came from mining, the unemployment rate for local Indigenous residents stood at 31%. In Coolgardie, where 66% of jobs came from mining, the Indigenous unemployment rate stood at 26% (Dockery, 2014, p. 82). Compared with non-mining areas, all mining-intensive areas across WA did not reveal higher than average Indigenous participation and employment rates (Dockery, 2014, p. 83). “On these figures,” Dockery (2014) concluded, “it is hard to believe the resource industry, as a whole, has made a concerted effort to accommodate Indigenous people in meeting their labour demands, or in extending opportunities created by the mining boom to local Indigenous populations” (Dockery, 2014, p. 86).

Similar findings are found in Taylor and Scambary’s (2005) study of Indigenous labour market outcomes in WA’s Pilbara region (the epicentre of the State’s mining boom) over the 40-year period between 1960 and 2000. The study concluded that, despite 40 years of sustained economic growth and development in the Pilbara region, the disproportionately low labour force status of local Indigenous residents “ha[d] barely altered” (Taylor & Scambary, 2005, p. 146), and as a result of ongoing exclusion of Indigenous people from the mainstream labour market, “dependence on government remains high and the relative economic status of Indigenous people residing adjacent to major long-life mines is similar to that of Indigenous people elsewhere in regional and remote Australia” (Taylor & Scambary, 2005, p. 1). The authors pointed out that over 60% of mining operations in the Pilbara region took place in and around Aboriginal communities, and that private sector economic activity driven by the minerals industry accounted for more than 80% of local employment (Taylor & Scambary, 2005, p. 33).

Government sector employment through Community Development Employment Projects (CDEP), a work-for-the-dole employment scheme, was heavily relied upon by local Indigenous residents over the period 1977-2000 (Taylor & Scambary, 2005, p. 28). Although CDEP failed to provide a secure economic base for local Indigenous people as work was predominantly intermittent and part-time (Taylor & Scambary, 2005, p. 30). Taylor and Scambary (2005) highlighted a significant lack of industry-based skills among young adults in the local Indigenous population in the Pilbara region, which they attribute in part to the mining industry’s near-exclusive focus on developing skills for older Indigenous residents (Taylor & Scambary, 2005, p. 146).
Neglect of the younger generation over the period 1960-2000 led to intractably low levels of educational attainment (i.e. literacy and numeracy) and training and qualifications, which rendered young Indigenous adults “ill-equipped for workforce participation” (Taylor & Scambary, 2005, p. 146). The lack of human capital among young Indigenous adults was compounded by poverty, inadequate housing, poor health (i.e., high levels of morbidity and mortality), substance abuse, and low motivation (Taylor & Scambary, 2005, pp. 146, 40, 152). As a result, there was a “generational attrition” (Taylor & Scambary, 2005, p. 146) in the trades skill-base for young Indigenous adults in WA’s Pilbara region over the period 1960-2000 (Taylor & Scambary, 2005, p. 146).

The mining sector has done little to provide Indigenous job seekers with sustainable economic options; the jobs generated in the resource industry are largely intermittent and comprised of unskilled manual labour. Further, the mining sector has had difficulty accommodating Indigenous cultural needs and concerns (i.e. socio-cultural obligations to care for land). As numerous researchers pointed out, the design strategies and approaches used by the resource sector were largely the same as those used by the Australian government to design and implement Indigenous-specific policies, programs and services. The resource sector adopted a ‘top-down’, ‘mainstreaming’ approach to developing traineeships, apprenticeships and employment programs that ultimately excluded Indigenous Australians from decision-making structures and processes, and which undermined any chance of integrating Indigenous social, cultural and development needs into programs, services and outcomes (see Boughton, 1998, p. 29; Pearson & Chatterjee, 2010; Scott & Durey, 2014; O’Faircheallaigh, 2006; Scambary, 2013). Brueckner et al. (2014) concluded that “top-down decision-making by the mining industry serves its own interests while subordinating [Indigenous] community needs, reproduces power imbalances, maintains the status quo and stifles inclusive and productive debate” (Brueckner et al., 2014, p. 283).

Further, by instantiating a form of development that prioritises economic factors at the expense of Indigenous community, social, cultural and environmental needs, many Indigenous Australians claimed that mining does not qualify as sustainable development (Grieves, 2009; Maddison, 2009; Brueckner, Durey, Mayes & Pforr, 2014; Scott & Durey, 2014; Moran, 2016).
6.2 *Examining the dominant development paradigm*

It is important to examine how the dominant development model, which is the bedrock of the mainstream Indigenous policy design process, fails to adequately address Indigenous value frameworks and development needs and aspirations. In other words, evidence suggested that it is crucial for researchers to understand how the dominant form of development valorises economic factors at the expense of Indigenous community, social, cultural, and environmental needs, and how a shift away from this development discourse towards a green economy can refocus policy-makers’ attention on Indigenous cultural frameworks.

Over the last two centuries, social development and progress in the West has largely been driven by a single theoretical paradigm: (neo)classical economic theory (see Mosco, 2009; Feiner & Roberts, 1990). A fundamental theoretical proposition of (neo)classical economic theory is that individual and national wellbeing is dependent on two determining factors: 1) increases in real net national disposable income per capita and 2) increases in economic development and growth as measured by gross domestic product (GDP) or gross national product (GNP) per capita (Australian Bureau of Statistics (ABS) 1370.0, 2013; Hamilton, 1997, p. 5).

An increase in real per capita disposable income indicates an increase in purchasing power, which “translates into a higher level of wellbeing through the consumption of goods and services” (ABS 1370.0, 2013). A numerical increase in per capita income acts as a progress indicator for improvements in economic welfare (or material prosperity) as citizens’ capacity to consume goods and services (i.e. food, clothing, housing, utilities, health care, education), and to accumulate wealth and assets, increases. Coupled with increasing economic development and growth, these two factors are assumed by neoclassical economic theory to account for improvements in both individual and societal wellbeing.

Despite some significant improvements in material living standards for the majority of non-Indigenous people in the West (especially since the 1950s), the maximisation of economic production and consumption of material resources has had detrimental effects on the social, economic and environmental health and wellbeing of recent generations and “presents tremendous risks and challenges for future generations” (United Nations Environment Programme [UNEP], 2011, pp. 1-2). In a landmark report by UNEP, entitled, ‘Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication’ (2011), it was concluded that mainstream (neoclassical) economic policies (particularly over the past century) have been premised on various ‘perverse’ market incentives (i.e. unconstrained capital accumulation and the inefficient use of natural capital; ‘perverse’ government subsidies and short-term economic thinking) which has caused a problem of ‘gross capital misallocation’; the West’s rapid and unconstrained accumulation of physical, financial and human capital has taken place at the expense of social and environmental ‘externalities’—negative aspects of the modern production process that are not ‘allocated’ any value in neoclassical economic theory (see Cato, 2009, p. 13; UNEP, 2011, p. 2).

Because negative externalities have been “unaccounted for and unchecked” (UNEP, 2011, p. 2) over the past two centuries, numerous critical social stressors (i.e. poverty, unemployment, economic inequality, mental ill-health) and critical environmental stressors (i.e. global warming, resource depletion, ecological degradation) are rapidly increasing “by almost any measure” (UNEP, 2014, p. 9). The Genuine Progress Indicator (GPI) is a comprehensive measure of economic development that includes negative social and environmental externalities; it uses twenty-six variables to account for costs such as unemployment, air pollution, land degradation, crime, climate change and economic inequality (see Sassen, 2014, p. 24). Ida Kubiszewski and colleagues from the Australian National University (ANU) generated a global overview of GPI changes over the fifty-year period between 1960 and 2010. In reference to Kubiszewski’s study, the sociologist Saskia Sassen concluded that “GPI per person peaked in 1978 and has been declining slowly but steadily ever since. In contrast, GDP per capita has been rising steadily since 1978. . . . [T]his
signals that social and environmental negatives have out-paced the growth of monetary wealth” (Sassen, 2014, p. 24).

Despite the global economy having tripled since 1950, human wellbeing on a global scale, as estimated by GPI, has been declining since 1978 (see Kubiszewski, 2016). Hamilton (1997) confirmed that the GPI index in Australia has been declining since 1978 and that social and environmental costs outweigh the benefits of economic growth (Hamilton, 1997, pp. 46-49).

The latter costs included unemployment, income distribution, air pollution, land degradation, loss of native forests, depletion of non-renewable energy resources, climate change, ozone depletion and underemployment. Hamilton (1997) further argued that the failure of wellbeing (as measured by GPI) to increase in Australia can be explained by the combined impact of negative externalities (Hamilton, 1997, p. 50). Kubiszewski (2016) concluded that the global economy has been in a period of ‘uneconomic growth’ for several decades, which is a period of growth that generates a decline in the quality of life experienced by nations.

From an environmental point of view, Daly and Farley (2004) similarly used the term ‘uneconomic growth’ to highlight the fact that the loss in natural capital has exceeded the benefits of increased material consumption (Daly & Farley, 2004, p. 16; Daly, 2008, p. 2). The extreme end of the ‘negative growth’ argument makes the claim that there exists a parallel between unrestrained economic growth and a malignant cancer sequence (see McMurtry, 1999, p. 114; Kovel, 2002).

In global market operations, the depletion and degradation of natural capital is largely unaccounted for. ‘Natural capital’ refers to the natural resources and ecosystems which all social and economic systems depend on for survival (or reproduction) (UNEP, 2011, p. 8). A lack of consideration for the environment in neoclassical economics has meant that no ‘value’ has been created in policy measures to ensure the preservation of natural capital (Cato, 2009, p. 13).

Hence, there has been a rapid and unconstrained accumulation of physical, financial and human capital with an excessive deterioration of natural capital; a process of ‘gross capital misallocation’ that has induced a global environmental crisis (see Millennium Ecosystem Assessment, 2005).
Environmental crises (critical environmental stressors) include, but are not limited to: global warming, biodiversity loss, desertification, ocean acidification, the disruption of the nitrogen and phosphorus cycles, the decreasing global supply of fresh water, land use degradation, chemical pollution, the hole in the ozone layer, and the melting of the Arctic sea ice (see Intergovernmental Panel on Climate Change [IPCC], 2014).

According to the UN-funded Millennium Ecosystem Assessment (MEA), in a report, entitled, ‘Ecosystems and Human Well-Being’ (2005), the last 50 years of industrial production (between 1955 and 2005) negatively altered (degraded) ecosystems “more rapidly and extensively than in any comparable period of time in human history” (MEA, 2005, p. 1). Approximately 60% of ecosystem services (ES) that humans and other species depend on for survival are “being degraded or used unsustainably” (MEA, 2005, p. 1).

6.3 Economism and ontological flaws

Neoclassical economic theory (‘neoliberalism’ being its most recent instantiation) has reduced the notion of development and progress to a unidimensional (or narrowly-defined) economic metric (see Stiglitz, Amartya & Fitoussi, 2010); the economic factor is seen as the ultimate determining factor in individual and societal wellbeing (Hall, 1986, p. 10). This approach is known as ‘economism’, a theoretical approach which treats “the economic foundations of society as the only determining structure” (Hall, 1986, p. 10). Economism is a theoretical reductionism insofar as it “reduces everything in a social formation to the economic level, and conceptualises all other types of social relations as directly and immediately ‘corresponding’ to the economic” (Hall, 1986, p. 10). Social and environmental determinants of wellbeing are devalued if social development is reduced to a single (economic) line of determination.

Numerous studies criticised the mainstream policy-making process for relying on economic indicators to conceptualise and measure individual and social wellbeing, which inevitably excludes all other, arguably more crucial aspects of, social, cultural and environmental life (see Cato, 2009; Stiglitz et al., 2010; UNEP, 2011, 2014). As Dalziel and
Saunders (2014) concluded in their study ‘Wellbeing Economics’, the use of narrow, ‘economistic’ measures of social development and progress excludes from its calculus “such items of irreplaceable value to wellbeing as the natural environment ...” (Dalziel & Saunders, 2014, p. 3).

The condition of the biosphere is ignored when society’s gaze is fixed on objective (numerically measured) economic data (see Kenis & Lievens, 2015, p. 48); a process of abstraction that focuses on specific economic factors (i.e. rates of labour market participation, levels of GDP and average disposable income) inevitably gives rise to analytical blind spots; what is left out of the ‘logic of calculation’ (or the policy decision-making structures and processes) is rendered ‘invisible’ (see Kenis & Lievens, 2015).

In a 2010 report by The Economics of Ecosystems and Biodiversity (TEEB), entitled, ‘Mainstreaming the Economics of Nature’, it was argued that “the invisibility of biodiversity values has often encouraged inefficient use or even destruction of the natural capital that is the foundation of our economies” (TEEB, 2010, p. 3). In a 2014 report by TEEB, it was further concluded that “the invisibility of nature in the economic choices we make [in] policy-making [is] a key driver of the ongoing depletion of ecosystems and biodiversity” (TEEB, 2014, p. 3). Neoclassical economics has been characterised as an operation that conforms to a “mathematical and mechanical logic” (Kenis & Lievens, 2015, p. 48) that is blind to (or divorced from) the complex operations of the natural world. As Kenis and Lievens (2015) argued:

[E]cosystems and the capitalist system have their own modes of operation, which increasingly conflict with each other: on the one side, ecosystems are characterised by specific natural cycles and processes; on the other side, there is the economic system in which money and commodities circulate, and which seems to have its own logic. From an ecological point of view, the flows of matter and energy are crucial, while for capitalism it is the flows of money and capital that matter. . . . Capitalism operates as if it is a world unto itself, which can abstract itself from the ecosystems. This implies a unique way of looking at and representing the world, characterised by a kind of system blindness: it continues to produce and pollute, regardless of the actual state of the ecosystems. (Kenis & Lievens, 2015, p. 47, emphasis added)
Vandana Shiva (2006) pointed out that ‘nature’s economy’ (the way in which nature intrinsically operates) is based on principles which are entirely at odds with the mainstream economy. Shiva (2006) argued that nature is treated by conventional economics as an object that can be instrumentalised in economic production and consideration of nature as a complex living process in itself (as a process of natural production with its own economy) is largely disregarded.

Kerry Arabena, an Indigenous scholar of Meriam descent, similarly argued that the ecological crises the modern world faces is the result of Western cultural practices delinking ‘human economies’ from ‘Earth economies’ (see Arabena, 2006, p. 38) and therefore Western cultural development suffers from a “disconnect disorder” (Arabena, 2006, p. 39). In Arabena’s own words:

The ‘disconnect disorder’ is a phrase which captures the disjunction between people engaged in exploitative development processes, and all other living and non-living life forms. In Australia and other settler societies, Indigenous peoples in particular have been excluded and exploited by development projects driven by people who have an inherent ‘disconnect disorder’ that manifests as an insensitivity to the devastation of the natural world and the people who are most intimate with it. (Arabena, 2006, p. 39)

Similarly, Sheehan (2011), in his article ‘Indigenous Knowledge and Respectful Design’, pointed out that the modern economy has been premised on a self-undermining logic which has given rise to what he calls an ‘ontological flaw’. Western society’s relationship to reality is flawed insofar as it disregards and disrespects (unsustainably exploits) the very thing it depends on for survival, a process that has given rise to environmental crises (i.e. climate change and global warming). This has obvious conceptual parallels to Arabena’s disconnect disorder. Sheehan (2011) argued that:
... climate change can be seen as an indicator of an ontological flaw in Western understanding because the supposedly inanimate world/environment is actually responding to human intrusions in ways that are difficult for modern society to grasp. The threatening reality of this view is that modern production-oriented cultures’ inability to adjust affirms this ontological flaw as a source of the wicked problems we face. ... Western production-oriented development is [a] “scavenger ideology,” in which every being and every value eventually is consumed by self-serving production. (Sheehan, 2011, p. 80)

The fundamental point is that there exists certain phenomena in the natural world that are not conducive to strict delimitation, objectification or numerical measurement, such as an ecosystem’s intricate operations, and thus are left out of the calculus of neoclassical economics. The system blindness necessarily ignores certain qualitative (non-economic) dimensions of life (see Kovel, 2007, p. 113). Conventional economics is unable to operate ‘holistically’, that is to say, take into account important non-economic (social and environmental) aspects of life. This lack of holistic thinking in mainstream economics and policy-design has been widely criticised in the literature (see Cato, 2009).

The mainstream model of development has ignored a number of important non-economic aspects of life, which for Indigenous Australians is critical, because we have seen that Indigenous health and wellbeing (the basis of Indigenous development needs and aspirations) is largely made up of non-economic (‘quality of life’; psychological and emotional) aspects. Of crucial importance to Indigenous Australians is development that affirms and maintains dimensions of life largely unaccounted for in mainstream (Indigenous) policy design. The dominant design framework has focused on non-Indigenous value frameworks and excluded Indigenous concerns of quality of life issues, such as the holistic conception of health and wellbeing.
6.4 Redirecting economism towards real quality of life

Psychological research has shown that “material consumption beyond real need can actually reduce overall wellbeing by creating an unending and unsatisfying drive for more stuff” (Costanza, Farley & Kubiszewski, 2010, p. 89); a modern affliction that has been termed ‘affluenza’. It is for this reason that Pickett and Wilkinson (2010) concluded that “if we are to gain further improvements in the real quality of life, we need to shift attention from material standards and economic growth to ways of improving the psychological, environmental and social wellbeing of whole societies” (Pickett & Wilkinson, 2010, p. 43, emphasis added).

The literature on subjective wellbeing often claimed that it is crucial to conceptualise subjective wellbeing in a theoretical framework that includes environmental and social sustainability. Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi, in a 2010 study, entitled, ‘Mis-Measuring Our Lives: Why GDP Doesn’t Add Up’, concluded that “the time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people’s well-being. And measures of well-being should be put in a context of sustainability” (Stiglitz et al., 2010, p. 10).

Similarly, Barry (2010) argued that economists and policy-makers need to “re-orientate the economy towards enhancing and being judged by ‘quality of life’ and ‘well-being’” (Barry, 2010, p. 111); to place “quality of life at the heart of economic thinking and policy” (Barry, 2010, p. 112). With respect to environmental sustainability, Sassen (2014) declared that concern for the biosphere needs to be included in all efforts to broaden and strengthen the individual and social wellbeing of societies (see Sassen, 2014, p. 5). In this light, subjective wellbeing becomes inseparable from the larger social, economic, and environmental context; in other words, individual and societal wellbeing should not be separated from the health of the natural environment, which in conventional economics has been treated as an externality.

Given the central aim of economic development (or development policy) is to improve wellbeing (individual and societal), research on subjective wellbeing has been rapidly expanding (see Kahneman & Sugden, 2005; Layard, 2006; Dolan & White, 2007; Dolan, Peasgood, White, 2008; Wilkinson & Pickett, 2010). A ‘psychosocial’ determinants approach to (subjective) wellbeing is required if the complexity of the notion of wellbeing is to be
addressed (Wilkinson & Pickett, 2010; Morice, 1976; Grieves, 2009; Atkinson, 2002; Marmot, Allen, Bell, Bloomer & Goldblatt, 2012; Barry, 2009; Layard, 2013). There is now a substantial body of evidence in the literature arguing for the use of subjective measures of wellbeing in economic, social and even environmental policy design (see Biddle, 2011, 2011a, 2011b, 2011c, 2013; Dockery, 2010; Cato, 2009; Dolan, Layard & Metcalfe, 2011; Kahneman & Krueger, 2006).

Economist Richard Layard contended that mental health is the biggest single influence on life satisfaction (see Layard, 2013, p. 1). Layard has demonstrated that people’s state of mental health affects earnings, educational performance, employment, physical health, and significantly impacts on public finance. Layard (2013) therefore concluded that “[e]motiona[ble] wellbeing should be the central variable of interest—the ultimate criterion by which we judge the state of our society. . . . Improving it [mental health] could be the most important single step forwards in the 21st Century” (Layard, 2013, pp. 12-13).

In light of the above, it follows that a substantial change in conceptual thinking is required regarding the question of social, ecological and economic sustainability of development (see Roche & Mudd, 2014, p. 192). Martin Brueckner (2014), in a chapter, entitled, ‘On the Social Sustainability of Development in Western Australia: A Community Perspective’, highlighted:

... the importance of articulating a new development agenda inclusive of the social aspects of sustainability beyond the standard economic indicators of employment and income ... [That is to say,] [s]ustainability must be understood more broadly so economic activity can deliver real improvements to social health and well-being. . . . A more sustainable form of resource-based development in WA therefore not only requires a much needed and yet to materialise environmental sensitivity but also a much stronger focus on the human aspects of development beyond narrow, economic conceptions of the social. (Brueckner, 2014, p. 252, emphasis added).

Given what we have seen thus far, Lange (2009) provided policy and design researchers with a succinct and appropriate definition of sustainable social development:
namely that a sustainable society is one that “satisfies its needs without diminishing the prospects for the health and well-being of self, other peoples, future generations, or the environment” (Lange, 2009, p. 193, cited in Griswold, 2013, p. 32). And it is this new development agenda that the green economy seeks to instantiate, which emerging evidence showed could allow policy-makers to integrate ‘non-economic’ (quality of life) aspects into the policy design process, a crucial success factor for designing Indigenous-focused policy, programs and services.

6.5 Transitioning towards a green economy

The world economy is transitioning away from non-renewable energy production towards renewable (green) energy production. In a report called ‘Galilee Basin—Unburnable Coal’ (2015), the Climate Council of Australia concluded that the world must cut its fossil fuel use by 2050 at the latest, and that 195 countries around the world (including Australia) have agreed to limit global warming to 2°C (above pre-industrial temperatures) (Climate Council [CC], 2015, p. 6). For Australia to comply with the agreement, the report found that 90% of the country’s existing coal reserves need to stay in the ground and no new mines be built (CC, 2015, p. 4). Hence, “the most pressing challenge Australia faces is how to phase out existing coal mines well before their reserves are exhausted” (CC, 2015, p. 1).

As international action against climate change increases, the global trend away from ‘dirty’ fossil fueled-power toward ‘clean’ renewable energy (such as solar power, wind power, hydropower and biofuels) is gaining rapid momentum. For instance, in 2014, global investment in clean energy was over US$300 billion, a five-fold increase from 2004 (see CC, 2015, p. 11). Global investment in new renewable capacity is now greater than investment in capacity for all fossil fuels combined (including coal, natural gas, and oil), “and the gap is expected to widen as investment in renewables surges ahead” (CC, 2015, p. 2).

In 2014, almost 28% of the world’s electricity generation capacity came from renewables and “more than half of the new power installations that were put into the world ... were renewable . . . not fossil, so you can see which way the winds blowing and investors can
see that to,” stated Professor of Climate Science Chris Rapely (Colvin, 2015). Green bond issuance is also rising, reaching an estimated US$11 billion in 2013. In March of the same year, the Australian Stock Exchange issued updated corporate governance reporting requirements for listed companies which stated that “listed entities ... [are required to] disclose whether it has any material exposure to economic, environmental and social sustainability risks and, if it does, how it manages or intends to manage those risks” (Australian Stock Exchange [ASX], 2014, p. 30).

As a result of global investment in renewables, the cost of solar photovoltaic (PV) modules has fallen by 75% since 2010, resulting in a 60-fold growth in capacity (CC, 2015, p. 11). By itself, solar could prevent the emission of more than 6 billion tonnes of CO2 per year by 2050, which is “more than all current energy-related CO2 emissions from the United States or almost all of the direct emissions from the transport sector worldwide today” (International Energy Agency, 2014).

It is predicted that renewables will soon become more competitive with non-renewable resources as governments around the world begin to remove subsidies for fossil fuels (which globally are on the order of US$600 billion per year). Under pressure from environmental organisations, as well as the International Monetary Fund (IMF) and the World Bank, many countries are already drawing up reform policies to effectively phase-out fossil fuel subsidies (see Riedy, 2013).

In China, investment in renewable energy is around US$90 billion per year and “has overtaken investment in fossil fuel capacity” (CC, 2015, p. 11). Thirty per cent of the world’s new investment in clean energy is in China, which already employs around 3 million people in renewable energy (CC, 2015, p. 9). Employment is projected to increase as China plans to cut coal consumption by 160 million tonnes between 2015 and 2020, together with the installation of almost 1,000 gigawatt (GW) of renewable power by 2020 (CC, 2015, p. 9). If the average household electricity consumption (kWh/year) in China is 1,349, then 1,000 GW of renewable power will run around 720 households each for an entire year.

In comparison to the country’s 455 million households, this is minor, nevertheless it is a significant investment toward the green economy and setting up low-carbon cities in China. Overall, the country’s plan is to increase its use of clean energy to 20% of total energy production by 2030. As a result, it is shifting away from its use of coal, which decreased by 3% in 2014 and is projected to drop by another 2.5% in 2015 (CC, 2015, p. 2). As Ross
Garnaut, Distinguished Professor of Economics at the ANU and Professorial Research Fellow in Economics at The University of Melbourne, declared, “[t]he huge upward pressure on global fossil fuel prices from Chinese economic growth ended in 2011 and will not return” (Garnaut, 2014, p. 4). Similarly, Tim Buckley, at the Institute for Energy Economics and Financial Analysis, claimed “coal will never boom again and that the industry is in long-term decline” (Seccombe, 2014).

Further, Australia’s principal trading partner in thermal coal, Japan, is expecting to reach cost-revenue parity and even profitability with its solar energy sector in late 2015, according to the Japan Renewable Energy Foundation (JREF) (see Ayre, 2015). Following the Fukushima nuclear power plant catastrophe in 2011, supportive governmental policies were introduced to facilitate the country’s shift away from nuclear energy toward renewables and natural gas (Ayre, 2015; McNeil, 2009, p. 58). Despite an increase in coal use following the nuclear shutdown in 2011, analysts predict Japan will source less expensive (sub-bituminous) coal from Indonesia and Canada, and reduce imports of high-grade coal from Australia, until renewables catch up (see Climate Works Australia, 2014).

6.6 The solar power industry and green jobs training programs

As a result of global investment in renewables, the cost of solar photovoltaic (PV) modules has fallen by 75% since 2010, resulting in a 60-fold growth in capacity (CC, 2015, p. 11). According to The International Energy Agency (IEA), solar energy from the sun could be the world’s largest single source of electricity generation by 2050, ahead of fossil fuels, nuclear and wind (see IEA, 2014). As the Climate Council (2015) stated, “[w]hen comparing new power plants on a cost per kilowatt-hour [kWh] basis, many renewable energy technologies (biomass, hydropower, geothermal, onshore wind and utility scale solar photovoltaic (PV)) are already cost-competitive with fossil fuelled power generation” (CC, 2015, p. 10).

In the US, tens of thousands of full-time jobs already exist in renewable energy. In 2011, the wind power industry employed 75,000 full-time-equivalent workers in areas such as
manufacturing, construction, project development, operations and maintenance, turbine installation, transportation and logistics, and legal, financial and consulting services. The solar power industry in the US is surpassing employment growth expectations by adding employees at a rate close to 20 times faster than the entire economy (The Solar Foundation [TSF], 2015, p. 1). According to the Solar Foundation’s National Solar Jobs Consensus 2014, a solar worker is an employee that spends a minimum 50% of their time on solar-related work. However, the study found that “more than 90% of workers spend 100% of their time on solar-related work” (TSF, 2015, p. 1).

Over the five-year period between 2009 and 2014, employment in the US solar industry grew by 86%, reaching roughly 80,000 domestic ‘living-wage’ jobs by 2014 (a living wage is a wage high enough to maintain a normal standard of living) (TSF, 2015, p. 1). In total in 2014, the US solar industry employed 173,807 workers (TSF, 2015, p. 1). Out of the various solar industry sectors, the solar installation sector is the single largest source of domestic employment growth, more than doubling in size over the four-year period between 2010 and 2014 (TSF, 2015, p. 1).

In 2014, while solar energy only made up around one per cent of total US electricity generation, the installation sector generated 50% more jobs than the total combined amount created by the oil and gas construction industry and the crude petroleum and natural gas extraction industry (TSF, 2015, p. 7). Furthermore, the projected growth in US solar employment in 2015 (20.8%) is around 8 times greater than the growth expected in the gas, coal and oil industries in the same year (TSF, 2015, p. 7).

Similar superior growth patterns in renewable energy employment are to be expected in Australia. In a study conducted by the Australian Cooperative Research Centre (CRC) for Renewable Energy, entitled, ‘The Economic Development Potential and Job Creation Potential of Renewable Energy’ (2002), researchers MacGill, Watt and Passey found that “renewable energy requires two to three times more people for operation than an equivalent coal-based energy project” (McNeil, 2009, p. 214).

Four main sectors comprise the solar industry worldwide: installation, manufacturing, project development, and sales and distribution. In the installation sector, the majority of workers have some connection to building trades, such as electricians, construction labourers, and plumbers, and work on facilities of all sizes, including smaller residential facilities as well as large commercial and utility-scale facilities (TSF, 2015, p. 11).
In the manufacturing sector, the majority of workers produce a variety of components and products for both domestic and international markets (which is increasing in the US as the global market in renewables grows), such as solar water heaters and PV modules (TSF, 2015, p. 20). In the sales and distribution sector, workers are primarily involved in wholesale and retail trade services that sell solar and other ancillary services to customers, together with warehousing and distributing domestically made solar goods to installers (TSF, 2015, p. 29). In the project development sector, companies typically work on larger, utility-scale solar projects, mainly using PV or concentrating solar power (CSP) (TSF, 2015, p. 35). “Project developers and utilities require a wider range of workers and contractors, including power plant operators, civil engineers, and land surveyors” (TSF, 2015, p. 35).

The tens of thousands of full-time jobs created by the US solar power industry were predominantly in the fields of engineering, production, construction, and sales, with the most well-established occupations being HVAC (heating, ventilating, and air conditioning) technicians, electrical and electronic equipment assemblers, and technical and scientific product sales representatives (TSF, 2015, p. 45). An important finding in the Solar Foundation’s 2015 report was that the solar industry is fast becoming diverse by attracting large proportions of women (21.6% in 2014), minorities (Latino or Hispanic, Asian or Pacific Islanders, and African-American) (29.3% in 2014) and veterans of the United States Armed Forces (9.7% in 2014) (TSF, 2015, p. 9).

Another important finding was the identification of an increasing shortage of qualified solar workers in the US labour market, as the majority of solar employers reported difficulty in hiring (about one in six reported that it is ‘very difficult’ to find qualified employees) (TSF, 2015, p. 59). Manufacturers and project developers noted difficulty finding engineers, while sales firms frequently cited issues with hiring salespeople. The most frequently cited reasons for hiring difficulties were ‘lack of relevant skills and experience’ (TSF, 2015, p. 53). As a result, the study concluded that employers will be more likely to turn to education and training (both on-the-job and with outside training providers) to meet their needs for a skilled workforce.

Furthermore, when hiring, previous experience is much more important for installers and project developers (the latter also prefer educational attainment such as a bachelor’s degree) than it is for manufacturers and salespeople (TSF, 2015, p. 54). In other words, “[c]redentials have more value to installers and developers, while manufacturers and sales
firms place less importance on them during the hiring process” (TSF, 2015, p. 54). The study recommends that credentials be pursued because higher-quality employees are more likely to be hired, generally speaking. Hence, “[b]oth credentialing bodies and the industry should ... work together to recognise and demonstrate the value of credentials in hiring practices and workforce training programs” (TSF, 2015, p. 55).

In relation to previous related experience and education, the solar industry in the US places greater emphasis on previous related experience (which two-thirds of new hires in 2014 possessed) (TSF, 2015, p. 58). Though certain sectors are more likely to require employees with higher education (such as project development), firms in every sector still place greater weight on experience over education. In the installation sector, nearly 70% of new hires had some form of previous experience, whereas less than 14% had some form of higher education, suggesting that these jobs—which constitute the bulk of total solar employment—may be filled by workers with little or no formal higher education (TSF, 2015, p. 58).

Literature suggested that renewable forms of energy not only creates more jobs per unit of electricity produced than non-renewable forms of energy do (MacGill et al., 2002; TSF, 2015), but also creates more jobs for those with less education (Green Skills Network [GSN], 2012, p. 20). According to one study, clean energy creates 3.6 times more jobs for people with high school certificates or less than fossil fuels do (RDA Global [RDAG], 2010, p. 7, quoted in GSN, 2012, p. 7). It is for this reason that green collar jobs, with the right training programs, can offer multiple pathways out of poverty for disadvantaged communities (see RDAG, 2010, p. 7).

To create a successful green collar jobs workforce development initiative that adequately reduces poverty, collaborative action is needed between the employment sector, educational sector, and government sector. Benefits for workers (i.e. access to life skills training and career advancement) is important (RDAG, 2010, p. 8). Green collar jobs bring about benefits to local communities through reduced energy costs for housing, job creation, reduction in carbon emissions, improved quality of life for residents, and improved quality of life for once unemployed workers (RDAG, 2010, p. 8).

A pilot program developed by ‘Detroiers Working for Environmental Justice’ generated economic benefits by training local workers in the specific skills needed by local environmental employers, provided social benefits through training in essential skills and
technical skills, and provided environmental benefits by transforming Detroit’s 50,000 brownfields into viable sustainable communities. Within a year, the pilot program assisted nearly 100 people living in poverty to transition into productive careers that offered a more stable and secure income and overall wellbeing (see RDAG, 2010, p. 9).

Critical components to success in relation to the design of green collar jobs training programs were identified by RDAG (2010) as:

1. all three components of the triple bottom line—people, planet, and profits—must be considered in the planning and design of the program if it is going to effectively achieve benefits at all levels;

2. include employer relationships and involvement at all stages of development;

3. form partnerships between employers, training, and educational organisations, as the needs of employers drive most of the outcomes for the program;

4. ensure that workers/students receive training that meets the needs of employers, as employers provide a job placement pipeline for training graduates;

5. programs should be comprehensive enough to mentor workers/students to overcome multiple barriers of participation, especially while they gain technical trades skills through on-the-job training;

6. offer contractors as a way for workers/students to gain relevant experience;

7. offer examples of multiple career paths within environmental disciplines;

8. offer workers/students multiple levels of training to improve personal financial management, obtain a drivers license, gain work (technical) skills, gain entrepreneurship skills, and essential life skills;
(9) devise multiple supports to increase success of program participants (i.e. provide access to training grants for qualified applicants); and

(10) ongoing case management in the program help increase successful transition out of poverty (RDAG, 2010, pp. 47-49).

Emerging evidence in the literature showed that the green economy promotes sustainable development in disadvantaged Aboriginal communities by offering green jobs training programs with Aboriginal culture and knowledge (see GSN, 2012, p. 21; Aboriginal Human Resource Council [AHRC], 2010). A critical success factor was the involvement of community Elders in addition to support workers (GSN, 2012, pp. 99-107). Involvement of Elders and support workers constitutes a relational peer-to-peer mentoring that fosters a support network that increases the chances of long-term success for program participants (RDAG, 2010, p. 60).

Elder participation constitutes what was referred to above as ‘cultural training’, which is meant to encourage young participants who are experiencing any difficulty to turn to an Elder for support. The cultural training and Elder participation seeks to address “some of the root causes of poverty and hopelessness, giving participants the tools and community of support to heal from past experiences and live more fruitful lives” (RDAG, 2010, p. 59). This may involve young Indigenous trainees turning to an Elder to work through some of the painful experiences that have deeply affected them, whether as a result of discrimination, colonisation-related intergenerational trauma, victimisation through physical or threatened violence, exposure to the criminal justice system, and/or homelessness and poverty-related issues.

With generic support from mentors who work alongside at-risk participants, overall support is to ensure that “participants are able to successfully navigate a personal life plan and attain the stability needed to finish the training and obtain sustainable employment” (GSN, 2012, p. 96). One such green jobs training program called ‘Choices for Youth’s Train for Trades Program’, in which participants are assigned support workers with construction backgrounds to work alongside youth to retrofit local resident houses, found that after
program evaluation, “79% of participants have either found full time work or are pursuing post secondary education in the trade industry after completing the program” (GSN, 2012, pp. 96-97).

The objective of this program was to “break the cycle of income support dependency and train youth with skills in construction and environmentally sustainable home retrofitting. Youth [were] equipped with the skills and support to sustain employment and increase their quality of life through a stable income” (GSN, 2012, p. 97). The costs for this program were generally shared by industry sponsors and the government. Furthermore, it was found that the design of green jobs training programs were much more effective and successful when based on multi-stakeholder participation and thorough consultations with all parties involved, which meant that programs were flexible enough to tailor to specific community needs, and also remain open and adaptable to future changes (GSN, 2012, p. 99).
7.1 Mixed methods approach

This project adopted a mixed methods approach to research and utilised four research modules for generating primary data: 1) an exploratory student survey (closed questionnaire); 2) semi-structured interviews; 3) a participatory workshop, and 4) a deliberative democratic forum. The main research question this Ph.D. research project sought to investigate was the following:

- What is required to appropriately facilitate Indigenous participation in Australia’s upcoming green economy?

Two subsidiary research questions were identified and investigated:

- a) What are the critical success factors to assist in the redesign of policies, programs and services to enable Indigenous Australians to participate in the low-carbon economy?

- b) Given design frameworks used to develop and implement Indigenous policies, programs and services have had difficulty supporting Indigenous cultural and development needs, what critical theoretical design components are required to assist in the reconceptualisation of a design framework that can generate culturally appropriate outcomes, especially in relation to the business and employment opportunities of an upcoming green economy?

This project prioritised the qualitative component of mixed methods research, as empirical evidence suggested that privileging subjective experience over objectivity (and
value neutrality) in projects that engage with oppressed social groups allows researchers to gain access to (or generate) previously marginalised knowledge and insights (subjectively-derived knowledge) (see Hesse-Biber, 2010). By privileging subjective experience, mixed methods allows for a “multilayered view of the social world . . . [which has proven to be] advantageous . . . as a means to get at subjugated knowledge—knowledge that has not usually been part of mainstream research inquiry” (Hesse-Biber, 2010, p. 9). In this sense, research participants were seen as active, three-dimensional knowing subjects with personal views and values, instead of passive (speechless), two-dimensional subject-objects reduced to quantitative data. This project’s approach made the assumption that “[Indigenous Australians] are the holders of expert knowledge about their lives and experiences . . . [and that they are] the experts on their needs” (Sherwood & Kendall, 2013, p. 92).

Being positioned in a constructivist and interpretivist framework, this approach maintains that meaning and ‘truth’ cannot be reduced to a universal state, but rather is produced or constructed in certain political, cultural, social and economic (historical) contexts (see Searle, 1995; Marinova & Hartz-Karp, 2017). Taking a ‘position from nowhere’ is theoretically unsound as the production of knowledge is always already value laden. Between researchers and research participants, meaning is co-created in an inclusive and safe space of inquiry (Kearns, 2000, p. 107). In this sense, mixed methods operates according to a participatory (engaged) research paradigm, and a participatory methodology allows for collaborative research activities and thus for researchers and participants (or ‘stakeholders’) to co-create outcomes (i.e. strategies and policies).

The principle stakeholders in this project were educators and training organisations, industry contacts, and Indigenous community representatives interested in the social, cultural and economic health and wellbeing of young Indigenous Australians in Perth, WA. Ethics clearance was granted from Swinburne University of Technology on behalf of Swinburne’s Human Research Ethics Committee (SUHREC) over the duration: 08-08-2016 to 31-03-2018, and from Curtin University on behalf of Curtin’s Human Research Ethics Committee over the duration: 06-11-2014 to 06-11-2018. All human research activity undertaken conformed to Swinburne and external regulatory standards, including the National Statement on Ethical Conduct in Human Research and the Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research (NHMRC, 2017).
It is important to point out that the method of data collection was not facilitated entirely by a service-design thinking framework, as some data generation had to comply with the larger framework developed by the ARC Linkage project, which was participatory in nature but not explicitly aligned with the framework developed herein. In short, my ability to collect data according to the conceptual framework developed was limited because it had to conform to a larger and more general participatory framework.

7.2 Survey design

The survey was utilised to target the audience’s (Indigenous youth) understanding of what is meant by the term ‘green jobs’, and gauge current and future levels of interest in regards to seeking employment in this area. The survey was conducted in Perth, WA over a 15-month period between 2014 and 2015. The 155 participants were SMYL current and past students (aged 16 to 18 years old) of Aboriginal and/or Torres Strait background (sex and gender variables excluded) and the survey was self-administered by the students at two main events organised by SMYL community services and the Aboriginal Workforce Development Centre: ‘Aspirational: Indigenous Youth Careers Pathways Program’ and ‘SMYL Graduation Ceremony’. Informed consent was presumed by return of the survey.

The survey was a specifically designed exploratory survey, and focused on the discovery of ideas and insights as opposed to collecting statistically accurate data. Exploratory research does not aim to provide final and conclusive answers and allows for the research direction to change as researcher’s understanding develops (see Brown, 2006; Dudovskiy, 2016). It is particularly valuable in social and policy research as it provides insights into how people perceive a problem, how they react to the issue, what meaning they attach and what concerns they may have (Schutt, 2012; Jha, 2014). The survey data was collected anonymously and processed quantitatively with a simple statistical analysis using SPSS.

The survey was designed using a participatory design approach (Martin & Hanington, 2012, p. 128). Participatory design is a design philosophy that places active stakeholder engagement at the centre of the research, design and development process. Any person or
organisation that intends to interact with the end product is considered to be a stakeholder (‘end user’) in the design process. There are a variety of methods and tools available to help facilitate active user participation, such as collaborative design sessions, cultural probes, diary studies, and role-playing (see Martin & Hanington, 2012). Most importantly, participatory design activities provide real-life opportunities for designers and stakeholders to iterate the project development trajectory through a cyclical process of prototyping, testing, analysing, and then refining a work in progress (Stickdorn & Schneider, 2011, p. 62).

Participatory design is fundamentally co-creative, as users and other stakeholders contribute to the framing and solving of design challenges in a democratically open environment (Stickdorn & Schneider, 2011, p. 59). Through co-creation stakeholders add value to design outcomes in partnership with research and design professionals (Stickdorn & Schneider, 2011, p. 39). Value co-production can include economic, social, cultural, environmental, aesthetic, and functional (organisational) propositions.

As a user-centred design approach, participatory design requires that practitioners be empathetic to user needs. To do this, design outcomes should be experienced through the eyes of the end user; that is, “designers must slip into the [user’s] shoes and understand their individual service experience and its wider context” (Stickdorn & Schneider, 2011, p. 37). As a result, a comprehensive understanding of needs, wants, habits, limitations, culture, social context and motivation of people affected by the design outcome is crucial to all decision-making processes (Stickdorn & Schneider, 2011, p. 36). New value in a product or service is often created as a result of being empathetic to user needs, as empathy generates unique insights into individual experience and desire (Bezaitis & Robinson, 2011, pp. 198-200).

I chose to use a participatory design methodology to construct the survey because research in Indigenous Affairs shows that the limited successes of Indigenous-specific policies, programs and services are largely the result of ‘one size fits all’ approaches based on external (exclusive and decontextualised) decision-making processes made by non-Indigenous Australians. In other words, all major pre-existing design methodologies have difficulty incorporating any real participatory (co-creative, empathetic, or iterative) practices (see Cox, 2014; Moran, 2016; Phillips-Brown et al., 2013; Stewart et al., 2011).

It should be noted that an Indigenous-specific ‘service’ is broadly conceived here as any artifact designed to engage Indigenous peoples and that invites them to respond and to
interact; the survey (as a self-report instrument) is therefore understood to constitute an Indigenous-focused service (see Stickdorn & Schneider, 2011, p. 74).

Furthermore, recent evidence suggested that beneficial practices in Indigenous Affairs derive from participatory design principles, which, if appropriately applied to the research and design process, significantly increase the likelihood of bringing about positive design outcomes (see Moran, 2016). These evidence-based best-practices have been identified in the literature as those that actively involve stakeholders in all aspects of the project development process (Cox, 2014, p. 5; Phillips-Brown et al., 2013, p. 248); collaborate with stakeholders to generate solutions from the ‘ground up’ (Cox, 2014, p. 10); contextualise the design process by responding to local socioeconomic, environmental and cultural conditions (Phillips-Brown et al., 2013, p. 252; Cox, 2014, p. 10); support local capability and innovation by adopting a strengths-based approach (as opposed to a deficits-based model that justifies top-down control) (Phillips-Brown et al., 2013, p. 259; Stewart et al., 2011, p. 9; Cox, 2014, p. 9; Moran, 2016, pp. 194-195); respect Indigenous languages and cultures by ensuring that decision-making processes are culturally informed (Cox, 2014, p. 9); address structural problems and do not oversimplify complex issues (Cox, 2014, p. 10); and invest in long-term commitments by allowing development processes to learn, adapt, refocus and try again (Cox, 2014, p. 9; Moran, 2016, p. 186; Pearson, 2016).

The first collaborative design session was conducted on the college grounds with two senior staff members (key stakeholders in the overall project). The session was unstructured, face-to-face and entailed sitting round a small table with paper, pens and a laptop (which had the survey document originally drafted by the Curtin University research team). The staff members, of Indigenous and non-Indigenous backgrounds respectively, had been in charge of administering social support, training and employment-related services to at-risk young Indigenous people for several years. A few days later I conducted the second co-design session with the above-mentioned Indigenous staff member, again on the college grounds and with the same setup.

The first outcome from the design sessions was that the language used by the researchers in the original draft survey had to be altered to suit the end user (young Indigenous people). Ideally, a small group of end users should be present during the co-design process, but given it was school holidays this was not possible. In spite of this, the original language was found to be in an inappropriate register. For instance, the first question—*What*
is your current employment status?, had two response options: Employed, including casual, part-time and full-time; and Not employed—was changed to: What are you doing now?, with four response options: I go to school; I have a job; I am training; and I am looking for work or training. Similarly, the fourth question—Describe your knowledge of green jobs (e.g. renewable energy, carbon sequestration), accompanied by an empty response box—was changed to: Which jobs do you think are ‘green’ jobs?, with seven response options in the form of check boxes: managing waste; installing solar panels; saving water; caring for bushland; selling low-energy light bulbs; planting trees; and building insulation.

The original draft survey included a definition of ‘green’ jobs located on the top-centre of the page: ‘A green job is any job that contributes to a more sustainable world, including jobs that help to protect ecosystems and biodiversity; and minimise or avoid generation of waste and pollution’. During the design sessions this was changed to a shorter and more culturally appropriate definition: ‘Green jobs are jobs that care for the Earth and help reduce pollution and waste’, which was how the participants were primed to think about green jobs.

Further insights gained from the two design sessions were: the survey should be print-based (portable) and therefore not have to rely on internet connectivity; it should not be intimidating, but easy to use (efficient), thus no more than one page; and the ‘look and feel’ and general layout of the survey should be colourful and playful, not serious and outdated, meaning it should not “look like it came out of a university” (Godbold, 2009, p. 120; Stickdorn & Schneider, 2011, p. 77), or “look like something Microsoft [word] would make” (Godbold, 2009, p. 120).

Further iteration of the design outcome took place via online correspondence between the researchers and the staff members (see Appendices).
Q3) Do you know about "green" jobs?

**Answered:** 155  **Skipped:** 0

![Bar chart showing responses to Q3]

**Result:** Clear uncertainty regarding exact definition and role of green jobs (42% respondents indicated they do not know compared to 32% who do. The rest are uncertain. Total uncertainty: 68%)

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Q7) Are you interested in having a "green" job?

**Answered:** 155  **Skipped:** 0

![Pie chart showing responses to Q7]

**Result:** Disinterest in having a green job (only 18% in favor vs 23% directly opposed) Significant (59%) uncertainty.
Q7) Are you interested in having a "green" job?

Answered: 155  Skipped: 0

Result: Certainty that the future will have more green jobs (39% agree while 6.5% disagree) Significant (55%) uncertainty.
7.3 Interviews

The aim of the semi-structured interviews was to gain impressions from community, industry and training provider representatives regarding what is needed to facilitate Indigenous participation in the low-carbon economy, with particular focus on identifying opportunities and key barriers to progress. The recruitment of participants took place via direct invitation (using electronic, written or phone communication) through existing SMYL networks and contacts, and CUSP’s industry contacts. The thirteen (13) interviews were administered by ARC co-investigators (Philip Webster, Angela Rooney and myself) at CUSP (either by phone or in person) and were recorded and subsequently transcribed into written form. I did not conduct all of the interviews as my PhD was attached to an ARC Linkage project and so I relied on Philip Webster and Angela Rooney to help collect and organise the data. The participants were selected based on their expertise in Indigenous training and community development, knowledge of the renewable and non-renewable sector in WA, and level of immersion in local Indigenous communities.

Seven questions were devised and agreed upon:

1. In Western Australia, what opportunities exist for low-carbon employment and training?

2. Comment on the training of Indigenous people for new low-carbon opportunities.

3. Comment on the employment of Indigenous people in your experience, including in low-carbon jobs.

4. How can employment and training for low-carbon jobs be made attractive to: (a) Indigenous people and (b) potential employers?

5. Are you aware of any successful examples?

6. What are the existing barriers and what could be improved in both training and employment opportunities?
7. Is there any thing else that we have not covered in relation to job opportunities and training for Indigenous people for a low-carbon economy?

Interview findings identified three critical success factors for facilitating Indigenous entry into the low-carbon economy, each coupled with a number of barriers to progress. The first success factor was ‘Indigenous entrepreneurship’ and seeing it as a key driver of job growth for Indigenous Australians in the green economy. Three main barriers to Indigenous entrepreneurship were identified: 1) the lack of business experience in Indigenous communities; 2) the lack of capital investment as Indigenous enterprises were thought to be ‘too risky’; and 3) little willingness on the part of governments to move away from ‘paternalism’.

The second critical success factor was identified as the need to gain cultural acceptance (equal recognition for Indigenous cultural values) in all aspects of the education and training (employment) process. The two main barriers were identified as: 1) a lack of flexibility in the design of employment programs to embed Indigenous cultural practices and values; and 2) little workplace support for Indigenous cultural concerns.

The third critical success factor was placing importance on ‘caring for country’ (Indigenous traditional knowledges and connections to the land) in the education and training programs and explaining how this connects to green jobs. The three main barriers were identified as: 1) insufficient resources and funding for expanding the education and training system to integrate Indigenous ‘caring for country’ concerns; 2) little official recognition for the value of traditional knowledge as part of the education curriculum; and 3) the lack of Indigenous authority to action traditional knowledge as part of the official policy and decision making process.
7.4 Participatory Community Workshop

The three-hour participatory community workshop was held at South West Aboriginal Land and Sea Council (SWALSC) boardroom in 2016 and its aim was to invite participants to engage in an honest and open dialogue regarding the survey and interview findings and further develop key ideas for what is needed to achieve Indigenous green job growth. The recruitment of participants took place via direct invitation (using electronic, written or phone communication) through existing SMYL networks and contacts, and CUSP’s industry contacts. There were twelve participants, two of whom were not Indigenous Australians, representing Indigenous community groups and representatives interested in the wellbeing of young Indigenous people in regional WA. Morning tea and lunch were provided free of charge.

At the beginning a short presentation was given by the ARC lead investigator, a key representative of the industry partner, and myself, describing the ARC Linkage Project and key survey and interview findings (including barriers to progress). The process of an open, participatory and honest workshop was described simply as a safe space in which everyone has a say. The four principles were 1) Whoever comes is the right people; 2) Whatever happens is all that could have; 3) Whenever it starts is the right time; 4) When it is over, it is over. To generate discussion, the researchers asked participants to respond to survey and interview findings.

Key findings necessary to the present Ph.D. project from the participatory community workshop were identified as: 1) Indigenous economic independence and self-determination are crucial aspects to consider when designing green employment programs and services; 2) the funding system must be flexible enough to allow for long-term initiatives to be trialled and tested; 3) business or enterprise education is necessary; 4) tokenism in the workplace needs to be overcome with real effort to employ Indigenous Australians based on skills, merit and experience, in a way that seeks equal representation between Indigenous and non-Indigenous Australians; and 5) Western attitudes towards education need to change to accommodate Indigenous attitudes. Education should not aim to ‘convert’ Indigenous Australians into thinking like Westerners but rather respect and acknowledge Indigenous attitudes.
7.5 Deliberative Democracy Workshop

The six-hour-long deliberative democracy workshop took place in 2016 and was conducted with participants from the first workshop with other key representatives from industry, government and training organisations interested in Indigenous employment and wellbeing. The recruitment of participants took place via direct invitation (using electronic, written or phone communication) through existing SMYL networks and contacts, and CUSP’s industry contacts. Out of the thirty (30) participants in the workshop, a third were Indigenous people. The workshop used a 21st Century Town Meeting format (Gastil & Levine, 2005), with six round tables in a large open space. People were seated in a way that each table had representatives from business and/or industry, education, government and Indigenous community. Prior to the commencement of any discussions, the participants were given information about the outcomes of the first community workshop. The aim of the deliberative
democracy workshop was to create an environment that promoted democratic deliberation (Uhr, 1998; Dryzek, 2000; Gastil & Levine, 2005) and the development of realistic goals, proposals and strategies regarding how to generate participation for Indigenous Australians in the low-carbon society.

The workshop had six thirty-minute discussion sessions revolving around the following topics:

(1) Describe your view of what an ideal ‘green future’ would look and feel like, if it respected Aboriginal history, culture, skills and care for country.

(2) Describe a success story of Aboriginal employment (especially youth employment) you have experienced or heard about – and what we can learn from that story.

(3) What additional ideas do you have for Aboriginal youth employment in the green economy?

(4) What are the potential barriers to Aboriginal youth employment in the green economy? (Think about potential barriers in your industry, the public service, and as an educator)

(5) Given what we have learnt from past successful experiences, how can we overcome these barriers?

(6) Specifically, how can industry and government work better with educators to help prepare Aboriginal youth for green jobs?

The six round tables, each with four to five participants, were computer-networked with a single computer (laptop) per table. Each table had a person acting as facilitator and scribe who captured the discussions by inputting the information into a basic computer program with a text box per proposed discussion session. Before any information was entered into the text box there was deliberation around how to ‘capture’ the discussion or ideas generated. The laptop was passed around the table so that everyone had a chance to be the
facilitator and scribe and enter the information. After each session, the information was sent to a small team of researchers in the adjacent room who organised the data into main themes. After two group discussions the researchers produced a plenary report and presented it back to the group. This way the outcomes from the deliberations were projected on a display screen to everybody so as to create a more collective and inclusive approach to deliberation. Three plenary reports were created and a final report was produced at the end of the day (see Appendices).

7.6 Analysis and Discussion

Primary data from the above research modules were integrated and analysed collectively. Ten major categories were identified and provided the layout for analysis:

1. Criticism of the mainstream approach to Indigenous Affairs;
2. Criticism of the neoliberal approach to development;
3. Criticism of the non-renewable resources sector;
4. Criticism of the mainstream approach to (Indigenous) education, training and employment programs and services;
5. The importance of Indigenous owned and run enterprises;
6. The importance of addressing structural racism;
7. Criticism of the mainstream funding system;
8. The importance of considering the dominance of non-Indigenous corporations;
9. The importance of Indigenous autonomy and self-determination; and
10. Ambiguous nature of ‘green economy’ and ‘green jobs’.

The above categories were developed as a result of the themes and critical success factors that emerged during analysis of the literature. The primary data was ‘coded’ according to these
broad themes because of their analytical potential to convey to the reader the fundamental aspects in need of addressing if Indigenous Australians are to participate meaningfully in the emerging green economy.

7.6.1 Criticism of the mainstream approach to Indigenous Affairs

We’ve gone to a completely paternalistic way of dealing with Aboriginal people under conservative governments. It [paternalism] doesn’t work. At the end of the day it just hasn’t worked at all. It hasn’t worked at all. The only way we’re going to address this stuff [Indigenous disadvantage] is to give [Indigenous] people hope and the capacity to actually participate properly [in the design and implementation of Indigenous policy] . . .

— Interviewee: ‘John’, Indigenous Australian male adult, industry

The mainstream approach to designing and implementing Indigenous-specific policies and services, especially with respect to employment (education, training and support) services, was heavily criticised in the primary (interview, workshop and forum) data. Characterised as ‘paternalistic’, the mainstream approach was negatively seen to reduce Indigenous policy subjects to powerless (voiceless) objects. And an approach that disempowers policy subjects is an approach that Indigenous peoples find hopeless (‘hope’ here understood as the capacity of Indigenous peoples to genuinely influence the design process and outcome).

Recognised as a complex bureaucratic and institutional system designed by non-Indigenous Australians, ‘Indigenous Affairs’ was identified to function (conceptualise, design and implement policy) according to an inflexible and sclerotic policy framework, thus undermining Indigenous peoples’ capacity to engage and cooperate in the overall process. It was therefore assumed that the theoretical framework for engagement between government and Indigenous policy subjects was inappropriately theorised. Being seen as a ‘system’ it was assumed that the approach to Indigenous policy needs to be systematically rethought; a systems approach is required if the engagement framework is to be appropriately theorised.
The following questions therefore arose: How best to theorise Indigenous engagement and participation in the policy design process, especially with respect to employment (education, training and support) services? How should participation (cooperation) and engagement be conceptualised given Indigenous peoples have thus far been marginalised in the design process?

As for more ‘higher-level’ aspects, interview, workshop and forum data revealed that governments lack the capacity to innovate given the sclerotic (unadaptable) framework in which it operates. Serious restrictions on innovation in government departments was recognised; more specifically, decision-making structures and processes were identified as being highly regulated and thus failing to provide an appropriate ‘space’ for alternative (more creative) ideas to be ‘aired’ and tested. The freedom of institutional movement was also identified as being severely restricted, thus giving rise to siloed departmental ‘ghettoes’. This then led to significant concern regarding the lack of support for risk taking in government design and implementation practices.

It was recognised that Indigenous participation and engagement in Indigenous Affairs is political insofar as Indigenous Australians require decision-making power to influence outcomes. It was pointed out that Indigenous women are particularly disempowered in the decision-making process and that any attempt to redress the inequality in the Indigenous—non-Indigenous design process must focus on empowering Indigenous women. This is also true for design frameworks that seek to genuinely engage Indigenous Australians, namely that an inclusive and participatory framework must pay special attention to Indigenous female voices to make sure they are represented with equal weight to all others.

With respect to the Indigenous policy design and implementation process, interview, workshop and forum data revealed significant concern regarding the lack of effort being made by non-Indigenous Australians (principally government officials) to understand and take seriously Indigenous (cultural, social, political and spiritual) perspectives; for Indigenous—non-Indigenous design relations to be conducive to successful design outcomes it was seen to be essential for non-Indigenous Australians to accommodate and comprehend Indigenous cultural perspectives.

This raised the question of how best to theorise a design framework that genuinely accommodates Indigenous values. More specifically, evidence from the interviews, workshop and forum (see Appendices) highlighted the importance of respecting and incorporating
Aboriginal knowledges and spirituality into all aspects of the design process (especially with respect to the design and implementation of training programs). Put differently, there was an identified need to respect Indigenous worldviews and incorporate Indigenous value frameworks into all decision-making structures and processes. Of crucial importance in achieving such an approach was thought to be the existence of Indigenous authority to action such knowledge in all design practices.

As a corollary to the above, primary data (interviews, workshop and forum, see Appendices) indicated that Indigenous policy design needs to identify and support Indigenous notions of wellbeing; there exists certain cultural dimensions of Indigenous life that policy fails to take seriously. Affirmation of Indigenous cultural identity is therefore crucial, as this leads to increased self-esteem among Indigenous policy subjects.

7.6.2 Criticism of the neoliberal approach to development

Interviews revealed that the social and economic development model underpinning the government’s approach to Indigenous policy was criticised for being neoliberalist; neoliberalism (understood broadly as an unregulated market economy) was seen to have difficulty accommodating (respecting) Indigenous cultural needs and aspirations. More specifically, it was clearly pointed out that the notion of sustainability or sustainable development under neoliberalism is incompatible with Indigenous notions of sustainable development. Development for the former was seen to be based primarily on maximising profit at the expense of all other (cultural, social, environmental) concerns. Sustainable development under neoliberalism was therefore seen to refer to the sustained exploitation of land for profit. It is for this reason that an interviewee (‘Paul’, non-Indigenous Australian male adult, industry) claimed that “[t]he neoliberal ideology has no long term vision, it’s maximising profit immediately.”

The propensity of neoliberal economics to view the natural world as a commodity to be exploited, marketised and sold for (private) profit was seen to undermine the ability of governments to view land as a spiritual asset to Indigenous Australians. The government’s economistic approach to development has failed to accommodate (respect) Indigenous
peoples’ spiritual connection to land; in other words, the mainstream approach to Indigenous development policy has ignored (qualitative, non-material) dimensions of life deemed essential for Indigenous health and wellbeing. “Aboriginal people’s spiritual and physical connection to land and how they manage land has no value to these people [who endorse neoliberal economics] ... it has no value, it’s not a commodity” (Interviewee: ‘John’, Indigenous Australian male adult, industry).

7.6.3 Criticism of the non-renewable resources sector

Interview data revealed significant concern regarding the failure of WA’s mining boom to provide long-term economic development options for Indigenous Australians. This failure was identified as being due principally to the idea that neither government nor industry made any substantial effort to design and deliver Indigenous-specific employment programs to facilitate entry into the sector. As one interviewee claimed:

[During] the mining boom. Aboriginal employment became an afterthought towards the end when they ran out of employing university graduates, then employing year 12 graduates, then employing fly-in/fly-out workers from the working class suburbs. When they ran out of all of that pool, they then said ‘Oh well, let’s now look at some Aboriginal programs. (Interviewee: ‘Scott’, Indigenous Australian male adult, industry)

Primary data (interviews, workshop and forum, see Appendices) identified explicit reluctance and resistance by government and industry to set up comprehensive Indigenous-specific programs and services (including social services) to support Indigenous employment. For the employment services that were developed, it was revealed that they failed to appreciate (respect) and accommodate Indigenous cultural concerns, and instead adopted the government’s hegemonic ‘mainstreaming’ (culturally inappropriate) approach to economic development. Further, employment programs only offered entry-level (low-level) jobs for Indigenous Australian men, thus significantly marginalising Indigenous women. Evidence
also revealed overt racism and sexism in the non-renewable resources sector which disparaged both Indigenous men and women from seeking entry.

Given that the mining sector instantiated a form of neoliberal economic development, interview, workshop and forum data revealed the non-renewable resources sector as “poisoning the country”:

 Mining’s like ‘there is iron ore in the ground for the next 22 years here at this price. Once that’s done, we’re gone. We don’t want to see this place again. We have no attachment to it. What is the cheapest way to get this out of the ground, or the way that has the least amount of implications for us?’ and that’s a problem with the resource sector. It’s completely exploitive of the ground, the people and of country and of a nation ... So the problem with these companies is that their nature is that they’re not visionary, they’re not all long-term thinking, they have no morals and scruples. They do the bare minimum. (Interviewee: ‘Sam’, non-Indigenous Australian male adult, industry)

Interview and workshop data revealed a clear cultural conflict for Indigenous businesses servicing the non-renewable resources sector, given their concern for caring for country. As a result, an urgent need to develop an alternative (genuinely sustainable) development model was identified in the data, especially since the mining boom “is on its way out” (Interviewee: ‘Jerry’, Indigenous Australian male adult, training). It was clear that this new development model must move beyond the unsustainable nature of the non-renewable resources sector and place Indigenous notions of ecological sustainability at its core.

7.6.4 Criticism of the mainstream approach to (Indigenous) education, training and employment programs and services

There was substantial criticism evidenced in the primary data (interviews, workshop and forum; see Appendices) regarding the privatisation of the vocational education and training (VET) sector. The mainstream neoliberal (unregulated and competitive market-based)
policy framework was seen to compel the VET sector to fixate on commercial or financial outcomes and thus servicing job seekers who are already to an extent ‘job ready’, that is to say, in a relatively advantaged socioeconomic position, the result of which rendered the system incapable of servicing disadvantaged groups such as Indigenous Australians. The neoliberal financial incentive structure was seen to give rise to a narrow, ‘bare minimum’ approach to vocational education and training, which functions principally to secure private profits; this model was seen to have failed to provide anything of substantial value to Indigenous Australians.

The interviews, workshop and forum revealed a widespread belief that Indigenous Australians received little to no support in the VET sector and highlighted the absence of any system to implement a genuinely integrated (and individually-tailored) approach that could address the multifaceted issue of Indigenous disadvantage, or in other words, the multiple (health, social and economic) barriers to employment. In short, the sector had failed to accommodate the needs of most Indigenous job seekers. Given this, interviews revealed ‘structural inequality’ in the VET sector; that the way in which the system had been structured, organised, financed and delivered (in short, designed) had in fact marginalised and excluded Indigenous Australians.

Another view prevalent in the primary data (see Appendices) was that an overall new approach to education and training (the provisioning of employment services) was required if the sector was to seriously accommodate Indigenous needs. Of crucial importance was the belief that this new approach has to enable the sector to innovate and to develop the capacity to design and implement new ideas and methods. A key success factor that was seen to enable such an approach was to make sure all key stakeholders (i.e. employers, training organisations, governments, Indigenous communities, and researchers) are sufficiently linked and thus working together in an environment that is genuinely collaborative and efficient (flexible). It was argued that the government needs to invest significant resources into the sector to foster such an approach; that the government needs to enable (empower) training organisations to develop their own training models in an innovative and holistic way.

Providing job-specific skills to individuals in a preexisting (unregulated and competitive) labour market was seen to be too narrow an approach to support disadvantaged groups like Indigenous Australians, as it had fostered a system that is reactive and concerned only with private interests and individual jobseekers at the expense of a more forward-looking
set of investments into collective innovative practices. It is in this light that one interviewee (‘Luke’, non-Indigenous Australian male adult, training) declared that: “We’ve turned everything into a vocation and a vocation doesn’t drive innovation, it doesn’t drive growth, it doesn’t drive imagination and that’s what the Aboriginal community needs and while they have intrinsically those skills, without the support and structure around it, they’ll never meet that potential.” In other words, the framework’s sole focus on economic factors (acquiring a set of technical skills to gain entry into the labour market), together with the standardised delivery and assessment of discrete modules, was seen to discourage Indigenous job seekers from the VET sector, because it failed to accommodate Indigenous (community, social, cultural) needs and aspirations. The focus of vocational educational and training should, in the case of Indigenous Australians and other disadvantaged groups, be expanded to concentrate on social and cultural outcomes. Achieving holistic outcomes that incorporate social, cultural and economic factors was seen to be a critical success factor in delivering successful employment services to Indigenous Australians.

Primary data in the interviews, workshop and forum (see Appendices) explicitly indicated that an holistic (Indigenous-specific) approach to vocational education and training has to acknowledge and affirm Indigenous value (ontological, epistemological, ethical, political, scientific and spiritual) frameworks. Value should be placed on Indigenous knowledges and practices; all educational and training practices (including the design of the curriculum itself) should be framed and embedded within an Indigenous worldview. The fundamental reason why valorising Indigenous value frameworks is so important is because the affirmation of Indigenous culture and identity was seen to significantly improve Indigenous health and wellbeing (and thus increase the capacity of social and economic development). An holistic approach should therefore focus on contributing directly to Indigenous individual (psychological or emotional), social and cultural wellbeing.

The interviews, workshop and forum highlighted the importance of improving Indigenous job seekers’ self-esteem and confidence (emotional wellbeing) during the delivery of employment services, and that to do so requires Indigenous students to learn and celebrate (and thus maintain ownership of) Indigenous knowledges and practices, identity and culture. Learning outcomes should not be about job-specific skills but more importantly holistic (individual, social, cultural, technical and economic) outcomes. Evidence from the interviews, workshop and forum strongly suggested that motivation is a key success factor in Indigenous-
specific employment programs, and that what motivates Indigenous Australians to learn and seek employment derives fundamentally from the desire to support and maintain Indigenous values (connections to culture).

It was also made clear that in order to embed all education and training practices in an Indigenous worldview, Indigenous Australians would themselves need to design the content and goals of the curriculum, in a way that is genuinely collaborative and Indigenous controlled. Data from the interviews, workshop and forum revealed little official recognition of the value of Indigenous science, ways of being, thinking and doing in the mainstream education and training curriculum, which for participants in the study was seen as a significant flaw in the overall VET sector.

A general agreement emerged in the primary data (see interviews, workshop and forum data in Appendices) regarding the urgent need to develop holistic training packages specific to Indigenous Australians’ cultural and development needs and aspirations, and within a framework that enables equal power sharing and democratic participation and collaboration between all key stakeholders (including Indigenous communities). It was argued that such an approach would prove difficult to instantiate in the current VET sector environment, based as it is on serving private commercial interests within a neoliberal economic policy context. A community-driven and integrated approach is required so Indigenous Australians can plan for the future and develop (educate and train) according to Indigenous-specific values and needs.

Evidence from the interviews, workshop and forum (see Appendices) assumed the emerging low-carbon (green) economy held great promise for Indigenous Australians to meet their cultural and development needs, because it offers a model of development alternative to neoliberalism which acknowledges and celebrates Indigenous science and sustainable ways of being, thinking and doing. Thus interviews acknowledged the need for Australian governments to shift focus from neoliberal development principles toward a development framework that sustainably meets environmental, social, cultural and economic needs. To shift toward a green economic development model, however, data from interviews (see Appendices) revealed a belief that governments should not rely on unregulated market forces; relying on markets and commercial interests to bring about a development framework that incorporates long-term planning, comprehensive environmental awareness and a focus on social responsibility was seen to be unwise. In other words, the general view was that an
unregulated market is only ever reactive to commercial interests and thus has no moral foresight, especially with respect to meeting specific Indigenous cultural and development needs.

The same view applied to the VET sector; namely that if the sector is to develop an education and training framework that comprehensively meets the needs of Indigenous job seekers and communities in a green economic policy context, then governments should not rely on neoliberal markets and commercial interests to drive the VET sector. It is for this reason that an interviewee (‘Matthew’, Indigenous Australian male adult, training) claimed that “the privatisation of the training system has meant that it’s now become impossible to actually develop the kind of training skills and packages for a new economy, because the system we have now is reactive, it reacts to current frameworks.” The hegemonic approach to economic development and designing and delivering education and training services for Indigenous Australians is unable to consciously shape a future that is deemed valuable by Indigenous Australians and communities. A shift toward a green economic development model that valorises Indigenous values requires an alternative approach to designing and delivering economic policies and education and training (employment) services, and this requires “… a sophisticated, mature, forward-looking government bureaucracy…” (‘Interviewee: ‘Charlie’, Indigenous Australian male adult, education).

An holistic, integrated (systems-oriented) approach is required to design and implement an education and training framework that aligns with core Indigenous values (ways of being, thinking and doing). Power must therefore be shifted from the unregulated market toward collaborative Indigenous-non-Indigenous arrangements or groups that can together work to design and deliver innovative policies, services and futures.

The interviews, workshop and forum (see Appendices) pointed out that if the mainstream approach to education and training is used to (attempt to) deliver employment services and career opportunities for Indigenous Australians in the emerging green economy, it will very likely fail to have a significant effect on improving Indigenous disadvantage; indeed, if the same approach is used then it will likely further marginalise Indigenous Australians and communities and exclude them from participating in the emerging green labour market.

As for the specifics of designing Indigenous-focused education and training programs and services in a green economic policy context, evidence from the interviews, workshop and
forum (see Appendices) highlighted the importance of bridging the ‘gap’ between existing Indigenous knowledges and practices and ‘green’ economic knowledge; to conceptualise a framework that appropriately integrates Indigenous and non-Indigenous (green) knowledge so that Indigenous needs and aspirations overlap with green economic plans and aspirations. All educational and training practices should be contextualised and embedded within such a framework. For instance, classrooms should diagram Indigenous spiritual narratives and show how traditional Indigenous knowledges and practices are (to an extent) aligned with certain green economic principles. Another suggestion was to conduct classes ‘on country’ so as to go beyond the Western-centred, decontextualised approach to learning. Data also pointed out that such diagrams should not be confined to classrooms but rather utilised in workplace settings too.

A strong theme in the data was the importance of mentoring Indigenous students with Indigenous Elders and Aunties.

7.6.5 The importance of Indigenous owned and run enterprises

Common agreement emerged in the data regarding the importance of designing a system that supports and maintains business ventures that are Indigenous owned and run. Because Indigenous Australians are marginalised in the mainstream (non-Indigenous) world of business, the most effective and empowering approach to Indigenous economic development would be to set up and support enterprises that are Indigenous owned and run. As one interviewee (‘Matthew’, Indigenous Australian male adult, training) claimed: “At the end of the day if we’re expecting rich white people to look after black fellas, it isn’t going to happen.” In context, this statement refers to the fact that non-Indigenous Australians (‘rich white people’) own the majority of Australian businesses and have no incentive to set up sophisticated education and training programs and services to facilitate a significant amount of Indigenous employment. Moreover, if enterprises are to centre Indigenous values and maintain an Indigenous majority then Indigenous owned and run enterprises are essential.
Data indicated that Federal, state and local support was essential to set up and support Indigenous owned and run organisations and enterprises. As stated by one interviewee (‘Sarah’, Indigenous Australian female adult, training): “So if the state government or federal government wanted to see real growth [in Indigenous economic activity], they would be sponsoring, propping up and supporting a whole raft of Indigenous entrepreneurs or organisations whose job it would be to address the power needs [of their community and Australia].” The widespread need in Australia for sustainable generation of low- to zero-carbon (renewable) electricity is recognised in the data and taken as an opportunity to set up Indigenous-owned enterprises as a response to this need. Data also acknowledged that community-driven renewable energy Indigenous enterprises provide an incentive to address local development issues and foster a commitment to place: “[I]t’s essentially important to develop Indigenous owned and run enterprises, businesses, contractors. That’s where the growth is going to come. That’s where there’s an incentive or a desire to actually fix up the community, because people live there ...” (Interviewee: ‘John’, Indigenous Australian male adult, industry).

Evidence further revealed that because Indigenous owned and run organisations and businesses usually have a majority of Indigenous workers, feelings of community solidarity and community spirit are likely to ensue.

7.6.6 The importance of addressing structural racism

There is no strategic structure or mechanism to address the structural racism and the structural imbalance that exists in Australia.

— Interviewee: ‘John’, Indigenous Australian male adult, industry

Primary data indicated that addressing structural or institutional racism is key to developing a successful pathway into the (emerging) low-carbon economy for Indigenous Australians, especially with respect to setting up (funding and supporting) Indigenous owned and run enterprises.
The first notion of institutional racism was understood to refer to the way in which the mainstream (government and institutional) approach goes about designing and implementing training and education services for Indigenous job seekers, which was revealed to actually marginalise (unwittingly discriminate against) Indigenous (individual, social and cultural) needs and aspirations and thus significantly hinder Indigenous Australians from gaining economic independence on their own terms. This structural racism was seen to lead directly to an imbalance of (political and economic) power and thus the inability of Indigenous Australians to assert their interests regarding an appropriate approach to education and training and future employment opportunities. The power imbalance between governments and Indigenous Australians needs to be addressed; design mechanisms should be in place to address this power imbalance if Indigenous Australians are to have a chance in participating in the emerging green economy.

The second notion of structural racism was understood within a specific historical and geographical context, given primary research was undertaken in WA. This notion requires governments and institutions to acknowledge that more than two centuries of European colonisation has had a direct affect on present conditions for Indigenous Australians. More specifically, as Indigenous Australians were denied land ownership and forced into government-instituted indentured labour during colonisation (wherein wages were withheld by the government), Indigenous Australians were unable to build up any property and financial assets, assets which could be used for venture capital. The intergenerational poverty of Indigenous communities is therefore a direct result of colonisation. And it is for this reason that the following was stated:

We [Indigenous Australians] require much more support of Indigenous enterprises because not only are they dealing with risky ventures, they’re dealing with a structural racism that still permeates in Australia and that makes it much more difficult for Indigenous entrepreneurs or Indigenous people to actually get a foot in. Trying to raise venture capital if you’re an Aboriginal person, is nigh on impossible. Nigh on impossible. That’s why it needs to be supported by government. ... That’s not give people cash, but to help them set up businesses, help them to do the kind of stuff that would allow them to participate equally in the community. (Interviewee: ‘Peter’, Indigenous Australian male adult, training)
Because of structural racism, Indigenous Australians have not had equal opportunities to develop businesses. Equity of opportunity was seen then as not being about providing Indigenous peoples with the same conditions as given to non-Indigenous peoples, but rather a radically different approach to equality that recognises the past and its effect on the present. And the issue here was not seen as financial, but rather conceptual, in the sense that money is often waisted on programs and services that have been inadequately theorised and that the approach used to design, develop and implement Indigenous-specific policies and programs to support (green) economic engagement needs to be fundamentally rethought; it is the theoretical framework in which institutions and funding operates that needs to be addressed. Hence the historical picture must be taken into account and addressed in any approach that wishes to foster development of Indigenous owned and run businesses, which was taken as a crucial factor for success in the emerging green economy. It was indicated, then, that the issue of Indigenous venture capital becomes a social justice issue that requires confronting Australia’s colonial past and seeking financial reparations.

7.6.7 Criticism of the mainstream funding system

Significant concern was evidenced in the data regarding the failure of the government’s funding system to support Indigenous businesses. Indigenous ventures require support from a framework that promotes risk taking and innovation. The current approach is piecemeal and fragmented; funding should support long-term structural changes. It was stated that Australia’s funding system needs to be ‘decolonised’; that is to say, governments need to devolve power to Indigenous owned and run organisations; a more decentralised approach is required to shift emphasis from the government’s position of unilateral decision making; a framework that promotes a more collaborative and community-driven approach to funding is required. The notion of ‘decolonising’ the funding system was also seen to refer to a funding model that acknowledges historical injustice and thus makes financial reparations.
7.6.8 The importance of considering the dominance of non-Indigenous corporations

With respect to Indigenous business and employment opportunities in the emerging low-carbon economy, especially in relation to the growing solar sector in Australia, data showed significant concern over Indigenous Australians missing out on these opportunities as a result of mainstream non-Indigenous corporations dominating the renewable energy market and thus excluding Indigenous Australians, in much the same way as did the non-renewable resources sector (together with the government), in the sense that the corporations will be concerned solely with maximising profits and only offering Indigenous Australians and communities minimal education and training for low skilled jobs. In this light it is worth quoting at length the following statement from the interview data:

Aboriginals are either going to be passive consumers and they’re going to have a lot of white corporations or power corporations coming over there and making a truckload of money off them, or they’re going to own that process, manage themselves and be in charge of their own initiative ... [W]hat we’ve seen historically is that that won’t happen. What will happen is it will go to whoever’s going to commoditise or find a way to commercialise solar power production or wind power production and that’s where it will go. We probably have, I don’t know, 18 to 36 months to develop infrastructure on the ground before it’s too late because I actually think that’s about how long it is before we’re going to start seeing mainstream production of this kind of stuff, the mainstream marketing. (Interviewee: ‘Luke’, non-Indigenous Australian male adult, training)

In the above quote, the initial concern relates to Indigenous Australians (who are in a prime position to deliver renewable energy services in urban and peri-urban areas) being rendered passive consumers (rather than active producers) of clean energy services that have been privatised and delivered by non-Indigenous for-profit (remotely-based) corporations. The second concern relates to mainstream non-Indigenous corporations hiring Indigenous Australians in much the same way as the non-renewable resources sector, which reluctantly hired Indigenous job seekers to work in minimum pay, low-skilled jobs while maximising profits for shareholders.
Evidence in the data identified that place-based enterprises (in this case, Indigenous owned and run renewable energy enterprises) empower communities, as being in control of local assets (energy) is essential for promoting economic autonomy and self-determination. It was argued that power (in the form of limitless low-carbon energy) would be the most fundamental building block of community-driven and owned development, and that communities being in control of such an asset would be key to supporting Indigenous self-determination. A clean and reliable generation of power is also essential for the health and wellbeing of Indigenous Australians and Indigenous communities at large. Focus should therefore be on developing community infrastructure that is owned and maintained by community members themselves.

Another key theme identified in the data in relation to promoting Indigenous autonomy and self-determination, was that of supporting Indigenous women. As one interviewee (‘Clare’, Indigenous Australian female adult, community development) claimed: “The ... thing which is extremely self-evident is that if you want to change things in an Indigenous community deal with young women not with men. They are the decision-makers and they are the energisers.” In terms of family and community resilience in an Indigenous community, it was seen as essential for Indigenous women and mothers to be empowered. It was pointed out that the mining industry had significantly excluded Indigenous women, and that gender has to be considered in any approach that attempts to empower Indigenous communities. A comprehensive support structure should therefore be in place for Indigenous women.
7.6.10 Ambiguous nature of ‘green economy’ and ‘green jobs’

The survey, interviews, workshop and forum revealed significant confusion and lack of definitional clarity regarding the notion of a ‘green economy’ and ‘green jobs’. It was therefore pointed out that if green jobs are to be promoted and offered to Indigenous Australian job seekers then a precise definition and description of the role of green jobs is crucial. Also a green economic policy context has to be appropriately conceptualised if policymakers are to develop policies to facilitate Indigenous participation in the green economy. Despite this confusion, the survey, interviews, workshop and forum revealed a strong assumption that green jobs would align with traditional Indigenous values, that a significant amount of green jobs will come into existence in the near future, and that SMYL should therefore prepare to offer appropriate education and training programs and services to Indigenous youth and job seekers.

7.7 Potential benefits of a service design-thinking framework for Indigenous Affairs

The data and analysis clearly point out the need for an alternative approach to policy design and service and program implementation in Indigenous affairs and that the application of a framework that empowers Indigenous Australians and allows for co-creative design processes is warranted. It is the contention of this thesis that the most appropriate framework for what we have discovered (what the data and analysis strongly call for) is a decolonised, transversal and heterarchical service design-thinking framework. More fundamentally, that such a framework will likely enable Indigenous Australians to leverage the upcoming green economy in a way that affirms Indigenous autonomy, community resilience, cultural meaning and practices. The creation of economic opportunities that can genuinely respond to what Indigenous Australians desire is more likely to occur if the theoretical design framework developed herein is applied.

On a more specific design level, the design principles that make up this framework (as extrapolated in Chapters 3 and 4) and which provide marginalised peoples the opportunity to
create a future deemed desirable by the users themselves, are the following: non-linear, user-centred, decentralised, diagonal, heterarchical, iterative, open/flexible, holistic, emergent, political, and generative. As for how these design principles and the framework in which they are embedded respond more directly to what was revealed in the data and analysis, the most fundamental point is that as a society we have reached the point at which ample sustainable economic opportunities exist in the emerging green economy but a radically different approach to Indigenous policy and service design is required to genuinely empower Indigenous Australians to shape a future that they deem suitable. Emphasis is placed on ‘radical’ because the fundamental nature of how governments go about designing and implementing Indigenous policy has to be changed. And it is the framework developed herein that is required to make that change.

The design principles that constitute this framework work to counteract paternalism and its promotion of unequal and disempowering design frameworks and practices. It promotes counter-hegemonic design practices and facilitates genuine and proper participation in all design and decision-making processes. It also enables Indigenous Australians to become designers of systems rather than participants in fragmented outcomes. At the heart of this framework is the aim to genuinely recognise Indigenous policy subjects as three-dimensional political subjects rather than two-dimensional (apolitical) subjects. Indigenous participants in the primary data (interviews, workshop, and forum) revealed on many occasions that governments do not provide the means to recognise Indigenous Australians as active, three-dimensional knowing subjects with personal views and values; that they are the experts on their needs; and that meaningful relationships must exist for change to occur (in both policy design and education and training environments). The framework developed herein seeks to promote a design environment that adequately responds to this.
Chapter 8

Empowering Indigenous-driven economic activities in an appropriately theorised green political economy using service design thinking

8.1 Green economic thinking and Indigenous value frameworks

We have seen that evidence in the literature pointed out that the policy framework used to improve Indigenous life outcomes needs to incorporate certain ‘non-economic’ (social, cultural, environmental, spiritual, and psychological) dimensions of life to account for an holistic approach to fulfilling Indigenous notions of development and health and wellbeing; that improvements in Indigenous health and wellbeing derive from both material and non-material aspects of life that policy frameworks in Indigenous Affairs need to value and accommodate for during the design and implementation of Indigenous-focused (health, education, training, and employment) policy.

Similarly, we have seen that the economy as a whole needs to “shift attention from material standards and economic growth to ways of improving the psychological, environmental and social wellbeing of whole societies” (Pickett & Wilkinson, 2010, p. 43). As a response, it has been assumed that the emerging green economic policy framework has the potential to provide Indigenous Affairs (and society at large) with an appropriate development model that respects and maintains Indigenous difference, while simultaneously addressing society’s tripartite (economic, social, and environmental) crisis. More precisely, the green (low-carbon) economy has the potential to offer Indigenous Australians with sustainable forms of economic activity that can meet Indigenous needs and aspirations.

Understanding the thematic overlap between green economic thinking and Indigenous value frameworks requires pointing out that certain green economists claim that they are fundamentally concerned with policy design and its emotional, psychological and spiritual purposes, in addition to generating ecologically sustainable economic activity (see Cato, 2009). We have seen that mainstream policy frameworks failed to incorporate important aspects of Indigenous health and wellbeing (including Indigenous spirituality) (see OID, 2.16), but research indicated that green economic thinking can respond to this by working
within a policy framework that valorises qualitative dimensions of being. In short, a green economic policy framework could respond to an issue deemed critically important in the Indigenous Affairs literature, namely the need to take seriously Indigenous notions of development and health and wellbeing (which spirituality is a key part of) during the design and implementation of Indigenous policy.

Green economists focus on generating ecologically sustainable forms of economic activity that can improve people’s subjective, as well as objective, wellbeing. Green economics is concerned with the “personal function of work—its emotional, intellectual, psychological and even spiritual purposes” (Cato, 2009, pp, 58-59). By “privileging work as a social, humanising process and not merely an instrumental necessity [as is the case with work conceptualised according to a neoliberal capitalist framework] ... [green economists] believe it is important to accept that some aspects of life have social or spiritual worth that simply cannot be measured [that is to say, reduced to an economistic framework]” (Cato, 2009, p. 60). It is for this reason that “[g]reen economics calls for a richer and deeper understanding of people, their relationships, and how they behave and are motivated. The ‘needs’ we are concerned about are not merely physical needs but also psychological and spiritual needs” (Cato, 2009, p. 3). In short, green economics aims to place “quality of life at the heart of economic thinking and policy” (Barry, 2010, p. 112).

Drawing on Schumacher’s concept of ‘right livelihood’, green economists claim that economic activities constitute “a means of achieving subsistence without causing offence to one’s own values, to other people or to one’s environment ...” (Cato, 2009, p. 61). For many Indigenous Australians working in the non-renewable resources (mining) industry, the concept of right livelihood was largely unachievable. Ample evidence in the literature showed that Indigenous Australians involved with the mining industry had “emphasise[d] a desire for alternative forms of economic engagement that combine[d] access to the mainstream economy with the maintenance and enhancement of Indigenous institutions [Indigenous organisations that promote culturally appropriate economic activities]” (Scambary, 2103, p. vii). In other words, mining caused offence to the cultural values of many Indigenous Australians.

Many Indigenous Australians desire economic engagement outside the “the neo-liberal development ethos [because it does not constitute a] sustainable development future ...” (Scambary, 2103, p. vii). More broadly, evidence in interviews (see above) revealed
widespread “caution about using land for development projects that are not ecologically sustainable, as there is a cultural imperative that they [Indigenous Australians] sustain the land for generations to come” (Maddison, 2009, p. 7). As stated by the Central and Northern Land Councils:

Our land is our life ... For us, land isn’t simply a resource to be exploited. It provides us with food and materials for life, but it also provides our identity and it must be looked after, both physically and spiritually. If we abuse our land, or allow someone else to abuse it, we too suffer. (Central and Northern Land Councils, 1994, p. 8, cited in Maddison, 2009, p. 78).

Fundamental to a development project that seeks to fulfil Indigenous social and cultural concerns is one that does not exploit the land, but rather moves toward “[a]n economy based on renewable resources carefully managed for sustained yield and long-term productivity of all its resources . . .” (Cato, 2009, p. 27). Furthermore, the economic activities in a green development project should not be driven by individuals implicitly theorised as *homo economicus*, but rather Indigenous Australians *ontologically anchored in Indigenous value frameworks* (see Altman & Hinkson, 2010, p. 191; see Appendices).

8.2 *Indigenous owned and operated renewable energy social enterprises*

A model of green economic development that evidence in the literature and primary data identified as being able to fulfil the above requirements (supporting and maintaining Indigenous specific determinants of individual and community health and wellbeing; a ‘right livelihood’ as conceived within an Indigenous value and green framework), is one that generates Indigenous owned and operated renewable energy social enterprises and the jobs created therein. Put differently, the most promising form of sustainable economic activity that can respond appropriately to Indigenous cultural needs and increase chances for Indigenous (economic) self-determination, is to be found in solar energy social enterprises that are Indigenous owned and run.
As described by Parrish and Foxon (2009), renewable energy (‘sustainability-driven’) entrepreneurship “employs private enterprise as a vehicle for contributing to environmental quality and social well-being, in addition to satisfying the entrepreneur’s own quality-of-life interests, with financial viability valued primarily as a means to achieving these ends” (Parrish & Foxon, 2009, p. 55). Indigenous owned and operated renewable energy enterprises have the ability to generate financial value in a way that affirms and maintains Indigenous Australians’ quality-of-life (social and cultural interests). According to Brueckner et al. (2011), “Indigenous entrepreneurship can usefully be understood in terms of pursuing economic opportunity for the purpose of diminishing Indigenous disadvantage through culturally viable and acceptable forms of wealth creation” (Brueckner et al., 2011, p. 1823).

Research showed that renewable energy generation and employment needs to be based on a decentralised model, as this creates more job opportunities for marginalised communities. Sweeney (2013) discovered that “[d]ecentralized [renewable energy] generation . . . is more conducive to local control, can create more jobs than utility–sized projects per million dollars invested, and can redefine the role and purpose of energy in a way that puts social and environmental needs before profit and accumulation” (Sweeney, 2013, p. 45). In the context of Indigenous Affairs, Sweeney’s last point is important, as we have seen that for many Indigenous Australians, wealth accumulation does not positively correlate with an increase in cultural health and wellbeing or in overall life satisfaction (see Manning, Ambrey & Fleming, 2015). As stated by Brueckner et al. (2011), “wealth accumulation and private ownership are not necessarily seen by Indigenous people as sources of success or social status in the way they are framed by the dominant, non-Indigenous culture” (Brueckner et al., 2011, p. 1823). An Indigenous owned and run solar energy social enterprise has the potential to provide Indigenous Australians with the chance to place Indigenous social and cultural needs before profit and accumulation.

Employment in Australia’s (and in particular Perth’s) solar power industry is expected to grow exponentially over the next few years, as batteries for rooftop solar rapidly drop in price and solar power becomes a more cost-effective way to produce electricity than coal (even in the absence of renewable energy subsidies). Labour demand for the solar power industry is predicted to come from Australian households and businesses needing to transition away from the national grid’s ever-increasing electricity prices towards cheap, reliable, and clean energy. As Chester (2013) pointed out:
There has been a rapid escalation in household electricity prices, primarily caused by substantial increases in regulated network charges for investment in peak capacity and asset replacement. In some Australian States, average household prices rose by more than one hundred percent during the 2007–2012 period, causing widespread poverty and deprivation for low-income households. (Chester, 2013, p. 488)

Evidence suggests that community owned and generated renewable energy enterprises could help overcome energy impoverishment, which is a significant form of social exclusion for low-income households (see Chester, 2014). A decentralised, community run and operated approach to renewable energy generation and employment which aims to empower workers and communities while preserving local ecosystems, is what is known in the literature as an ‘equitable (democratic) transition to a green economy’ (see Parrish & Foxon, 2009). Furthermore, renewable energy entrepreneurship “has been positioned as a critical ingredient in the transition to a sustainable economy” (Parrish & Foxon, 2009, p. 49). This is to say, renewable energy entrepreneurship advances the fundamental socio-technical transition that society needs to undergo if climate change is to be mitigated—a transition toward “[ecologically sustainable] socio-technical systems for meeting end-use demands for energy and other [social] services” (Parrish & Foxon, 2009, p. 49).

Further evidence revealed that place-based renewable energy social enterprises can play an important role in provisioning critical energy needs in places “neglected by government services and strictly market-driven private enterprise” (Parrish & Foxon, 2009, p. 49). A gap in meeting the needs of end-user energy consumers in an affordable manner often exists in disadvantaged populations and communities, a gap that is “left by commercial industries and government bodies” (Parrish & Foxon, 2009, p. 49; see Schaper, 2002; Volery, 2002; Austin, Stevenson & Wei-Skillern, 2006; Haugh, 2006; Seelos et al., 2006).

This is important in an Indigenous Australian context, as research showed that Indigenous disadvantage in rural and remote Australia has been further compounded by governments and industry inadequately investing in community infrastructure and social services, despite a large amount of public wealth collected from mining royalties. In one study, Langton and Mazel (2012) discovered that “little of the royalty monies [were] distributed to fund services and facilities for communities in the Pilbara’s mining provinces...
As a result, the state governments themselves accelerate poverty and disadvantage among Indigenous communities by refusing to allocate these communities a share of the wealth from state-collected royalties” (Langton & Mazel, 2012, p. 31). More broadly, inadequate social service delivery from the State government constitutes a major obstacle for Indigenous people wanting to achieve equitable access to employment opportunities (see Altman et al., 2004, p. 2).

8.3 A democratic transition to a green economy

A related concern in the literature and primary data is that of policy-makers having assumed that a green economic transition depends solely on technology and unregulated market forces (see Kenis & Lievens, 2015). Given development in a green economy needs to be holistic and democratic (simultaneously meet social, cultural, environmental, and economic needs) research warned that relying solely on technology and market mechanisms to shift the economy will produce undemocratic results (see Sweeney, 2013). In the absence of a democratic framework, large (non-Indigenous) for-profit corporations (monopolies) engaging in the green economy will likely focus “on what is good for business, not on what is good for the planet and the poor” (Shiva, 2011, p. 186). It is a question, then, of what is best for (Indigenous) workers, resilient communities, and local ecosystems. International research indicated that the dominant market–based approach to energy generation “has led to higher costs to the public ... almost invariably led to underinvestment, loss of jobs, reductions in wages and union coverage, worsening working conditions, and falling quality of service” (Sweeney, 2013, p. 39). It is for this reason that Kenis and Lievens (2015) raised the following critical question: “As a society, we face a huge choice: do we opt for mega-plants in the desert controlled by multinational corporations and banks, or for a decentralised energy network over which citizens and communities have real control?” (Kenis & Lievens, 2015, p. 133).

For marginalised communities and populations, the job-potential of the deployment of decentralised renewable energy generation:
... would appear to be large enough to drive a new jobs revolution ... But these jobs will not be created if profits and private markets dominate energy decisions. The only way this job potential can be realized, and done so in a way that is equitable and truly sustainable, is within a democratic framework ... (Sweeney, 2013, p. 47, emphasis added).

As the International Conference on Energy and Meteorology (ICEM) (2010) concluded:

If solar power ... is to have a significant effect on energy generation globally then it is far more likely to be based on a decentralised model than the heavily centralised system we have now. The future really requires solar panels on every roof ... rather than massive plants taking up dozens of square kilometres. It is unlikely that the industry as presently structured will ever provide this (ICEM, 2010, cited in Sweeney, 2013, p. 46).

8.4 The importance of bridging Indigenous and non-Indigenous knowledge

Throughout this research project we have seen that a key aspect to facilitating successful green employment programs for Indigenous Australians is to appropriately integrate Indigenous knowledges and cultural values into the design and implementation of green training and educational systems. This brings us to the importance of designing and implementing a cross-cultural pedagogy that combines Indigenous and non-Indigenous knowledges to ‘bridge the gap’ between Indigenous ecological knowledges and non-Indigenous (green or ‘eco-’) knowledges (see Arabena, 2006). It is the contention of the current research project that in light of the evidence in the primary and secondary data, the processes and aims of Indigenous-focused education and training in a green economic context should seek to challenge the status quo by offering alternative development models to those found in mainstream Australia, models that work to empower Indigenous communities and foster economic autonomy and self-determination. In this sense, we can claim that this type of
critical pedagogy seeks to “understand, reveal, and disrupt [the status quo, so as to realign] the processes and aims of education to emancipatory goals” (Grande, 2007, p. 317).

A critical pedagogical approach to green economic employment programs could be seen as contributing to the process of ‘decolonising’ Australia’s mainstream pedagogical frameworks, which so far largely exclude Indigenous ways of being, doing, and thinking. As Smith (2012) claimed, the Australasian curricula “reinforc[es] white cultural supremacy” (Smith, 2012, p. 136; see McGloin, 2008; Bethel, 2006; Edwards, 2011). Numerous researchers (Smith, 2012; Bowers, 2010; Arabena, 2006; Kawagley & Barnhardt, 1999; Cajete, 1999) pointed out that the classroom is not a neutral (apolitical) site of knowledge production, but rather a deeply political sector serving dominant ideologies. Education is therefore inseparable from the political and economic agenda it serves.

In this light, Smith (2012) called for a “critical pedagogy of decolonisation” (Smith, 2012, p. 36). Similarly, Arabena (2006) argued for a ‘universal citizen framework’ to initiate “processes of decolonisation [by way of] new constructs of knowledge” (Arabena, 2006, p. 44). The emerging green economy and its subsequent education and training systems could be utilised to develop a critical pedagogy of decolonisation, or at least to open up a discussion around the politics of knowledge production. For Smith (2012), Arabena (2006), and Bowers (2010), education needs to provide the student with alternative (non-Western) knowledges and practices to form different (postcolonial) ways of thinking, doing, and being. A green economic development model could offer a space for the postcolonial development of Indigenous epistemological and educational legitimacy and engagement (see Hart, 1997, p. 142).

A key part of critical pedagogy is place-based learning. There is evidence to suggest that students react positively to place-based methods of learning (Kawagley & Barnhardt, 1999; Bowers, 2010), because the knowledge gained through direct experience in the natural environment facilitates an emotional intelligence (an ‘internal passion’) (Grande, 2007, p. 319; Arabena, 2006, p. 42), rather than an understanding that is fundamentally decontextualised in classrooms. Place-based learning also helps cultivate a sense of connection or belonging to a certain locality which, in turn, can heighten the sense of responsibility one feels for the surrounding environment (Bowers, 2010, p. 214). Green training programs could incorporate place-based learning to appropriately deliver Indigenous knowledges and practices.
8.5 Directions for future research

This research project has pointed out that the best approach to empowering Indigenous Australians in the upcoming business and employment opportunities of a green economy is to work towards setting up Indigenous owned and operated renewable energy (particularly solar energy) social enterprises. Understanding how such enterprises are to be set up and implemented is a key direction for future research. Furthermore, research into designing Aboriginal owned and operated renewable energy co-operatives is another important direction for research. Co-operative workspaces are democratic in nature and empower workers to direct their own projects. Researching the development of renewable energy co-operatives in peri-urban and inner regional environments could produce significant progress toward empowering marginalised Indigenous communities, in a way that affirms core Indigenous cultural values.

Another important area of research would be the development of a decolonised funding scheme, which unfortunately this thesis could not address due to its limited scope. Further research is required to develop a decolonised funding scheme. This thesis has argued that the design framework developed could be the fundamental starting point.

8.6 Conclusion

Overall, this project has sought to make a significant contribution towards developing design approaches and strategies to facilitate the participation of Indigenous people for the growing labour market and business opportunities in low-carbon (particularly solar energy) technologies, with particular regard for the cultural context and strengths of Indigenous people and communities. It has also sought to make a significant contribution toward developing an Indigenised participatory research and design methodology for developing educational, training and related policies to achieve the best results in complex social, cultural and economic situations.
In response to the main research question: “Given that the design frameworks used to develop and implement Indigenous policies, programs and services have had difficulty supporting Indigenous cultural and development needs, what critical theoretical design components are required to assist in the reconceptualisation of a design framework that can generate culturally appropriate outcomes, especially in relation to the business and employment opportunities of an upcoming green economy?” we have seen that the most fundamental recommendation has been to operationalise a self-organising, transversal, heterarchical and Indigenised (decolonised) service design-thinking framework. In other words, a human-centred and service design-thinking framework that enables self-organising, transversal, heterarchical and Indigenised design practices is necessary to empower Indigenous Australians to design and implement a green jobs training program and thus direct their own projects in the upcoming green economy.

With respect to future sustainable green economic projects most suitable to achieving Indigenous social and cultural concerns, it was recommended that a decentralised, community owned and operated approach to renewable energy (particularly solar power) generation and employment which aims to empower workers and communities, while preserving local ecosystems, and in the form of Indigenous owned and run social enterprises, is the best approach.
Appendices

Appendix 1: Analysis of statistical (objectively measured) outcomes

Changes in Census data over the 35-year period between 1971 and 2002 show gradual and incremental improvements in the socioeconomic status of Indigenous Australians relative to non-Indigenous Australians. Improvement has been measured by an increase in the numerical measure of a standard socioeconomic variable, such as educational attainment, median individual and household income, private sector employment, labour force participation rate, health (life expectancy and morbidity rate), and housing status (see Altman & Hunter, 2003; Altman et al. 2004). The rate of improvement, however, was found to be too slow relative to the non-Indigenous population, and in 2006 the socioeconomic disparities between Indigenous and non-Indigenous Australians remained “unacceptably high” (Altman et al., 2008, p. 18). With respect to median individual income levels, it was concluded that “at least another 100 years” (Altman et al., 2008, p. 14) would be required to ‘close the gap’. This claim was made under the assumption that macroeconomic growth will be sustained in the future and that growing national income inequality declines over the next decade (Altman et al., 2008, p. 14). Evidence has shown that macroeconomic growth has been slow and that Australia’s level of national income inequality has been growing exponentially over the last two decades (see Richardson & Denniss, 2014; Australian Council of Social Service [ACOSS], 2015).

In 2006, with respect to median household incomes, it was concluded that the statistical gap between Indigenous and non-Indigenous Australians “will not occur for at least another 100 years” (Altman et al., 2008, p. 14). For labour force participation rates between Indigenous and other Australians, the gap “will not be eliminated within the next century” (Altman et al., 2008, p. 14). And Altman et al. (2004, p. 18) reported an intractably low Indigenous health status compared to other Australians.

Given that there were incremental improvements in some socioeconomic indicators for Indigenous Australians between 1971 and 2006 (particularly in employment, education, income and housing), Altman et al. (2004) declared that Indigenous policy has not been an “unmitigated failure” (Altman et al., 2004, p. 19). The authors claimed that such findings
counter the view—which “has some currency” (Altman et al. 2004, p. 19)—that “debate in Indigenous affairs often involves the assertion that the last 30 years [between 1971 and 2001] has been a period of policy failure” (Altman et al. 2004, p. 1). However, six years later, Dockery (2010) concluded that the history of Indigenous Affairs had been a history of failure. It is worth quoting Dockery at length:

> From the arrival of the First Fleet in 1788 and the subsequent emergence of Western society as the dominant culture, along with its market economy and associated social, legal and economic institutions, policy towards the Indigenous population has oscillated through a number of stages. It remains an issue of intense debate among Indigenous and non-Indigenous Australians alike. The one point of consensus is that our past efforts have been a failure. The current plight of Indigenous Australians, evident in almost any conceivable measure of socio-economic wellbeing, is totally unacceptable in such a wealthy society and needs, somehow, to be addressed as a matter of national priority. (Dockery, 2010, p. 2)

Despite having claimed that Indigenous Affairs has not been an unmitigated failure, Altman et al. (2008) concluded that given the long lead times required to close the gaps in health, income and labour market participation rates between Indigenous and other Australians, “some fundamentally new approach [to Indigenous Affairs policy] might be needed to ensure structural change of such a degree as to significantly alter the time frame we are predicting” (Altman et al., 2008, p. 18, added emphasis).

If we concentrate on the ten-year period between 1991 and 2001, we find that Altman and Hunter (2003) concluded that “[there has been] no statistical evidence from census data [that has revealed] that Australian government policies and programs delivered better (or indeed worse) outcomes for Indigenous Australians, at the national level, than those of their political predecessors” (Altman, Biddle & Hunter, 2004, p. 2). The intractability of Indigenous disadvantage during the decade 1991-2001 led former Aboriginal and Torres Strait Islander Social Justice Commissioner William Jonas, to declare that “[o]verall, it is difficult to see any progressive trend towards reducing the level of inequality experienced by Indigenous
people compared to non-Indigenous people (even in areas where there might have been some marginal improvement in absolute terms)” (Jonas, 2004, p. 2, cited in Altman, 2004).


The claim that the history of Indigenous Affairs has been an unmitigated failure is a contested one. A significant amount of the Indigenous Affairs literature refers to past policy initiatives as a period of implementation failure (see Boughton, 1998, p. 4; Phillips-Brown, Reddel & Gleeson, 2013, p. 255; Dockery, 2010, p. 315; Kowal, 2015, p. 51). For the Indigenous author Alexis Wright, Indigenous Affairs signifies “a history of wasteful government policies that have never worked” (Wright, 2016, p. 75).


Subtitled ‘The Challenge for Australia’, the policy framework has six principal goals: 1) close the gap in life expectancy by 2031; 2) halve the gap in mortality rates for Indigenous children under 5 by 2018; 3) ensure access to early childhood education for all Indigenous 4-year-olds in remote communities by 2013; 4) halve the gap in reading, writing and numeracy achievements for children by 2018; 5) halve the gap for Indigenous Australians aged 20-24 in Year 12 attainment or equivalent attainment rates by 2020; and 6) halve the gap in employment outcomes between Indigenous and non-Indigenous Australians by 2018 (Commonwealth of Australia, 2009).

One of the six targets—to close the life expectancy gap by 2031—plans to achieve “full statistical convergence [or] closure” (Altman, 2013). Targets 2, 4, 5 and 6 aim to achieve partial closure by halving the gap in Indigenous disadvantage, whereas target 3 plans to increase the availability of a place for Indigenous children in a non-compulsory preschool
program. The six targets are to be met according to four different time frames: 2013, 2018, 2020, and 2031. The rationale for why these years have been chosen is not provided (see Altman, 2013).

Over a six year period—from when the strategy first operationalised in 2009 to the release of the ‘Close the Gap Progress and Priorities Report 2015’, an annual report created by the Federal Government to assess the policy’s overall effectiveness on Indigenous health and socioeconomic wellbeing—there has been an increase in life expectancy by 0.8 years for Indigenous men and “only 0.1 years for Indigenous women” (Holland, 2015, p. 8). The Progress and Priorities Report (2015) concluded that “the nation is not on track to meet the 2030 ... life expectancy equality target” (Holland, 2015, p. 8). While figures reveal a slight reduction in the disparity between Indigenous and non-Indigenous life expectancy rates, overall progress for the Indigenous population has slowed since 2001, and a national gap of roughly 10.6 years remains (Holland, 2015, p. 7). If the ratio of the rate of increase of Indigenous life expectancy to the non-Indigenous rate remains the same—3.2:1.6 for Indigenous and non-Indigenous males, and 1.2:1 for Indigenous and non-Indigenous females, respectively (Holland, 2015, p. 7)—then the gap for Indigenous males will close in 92.7 years, and in roughly 600 years for Indigenous females.

The gap in life expectancy is able to close as the Indigenous population has a higher rate of increase than the non-Indigenous one. The same cannot be said for the gap in Indigenous and non-Indigenous child death rates (the subject of the second target), for the ratio of the Indigenous child mortality rate to the non-Indigenous rate has not changed over the last 10 years, and remains 1.9 times higher for the Indigenous population. As a result, “[t]he gap cannot close until this ratio declines” (Holland, 2015, p. 16).

For the sixth target, to close the gap in employment outcomes by 2018, no progress has been made since the 2008 baseline (Closing the Gap: Prime Minister’s Report [CGPMR], 2015, p. 18). The gap has widened by 6.9 percentage points, up from 21.2 to 28.1, as the proportion of Indigenous Australians who were employed over the period 2008-2013 fell from 53.8% to 45.7%, while the proportion of employed non-Indigenous Australians increased by 0.6 points, up from 75% to 75.6%, over the same period (CGPMR, 2015, p. 18). Target number 4, to halve the gap in reading, writing and numeracy achievements for Indigenous children by 2018, is not on track (CGPMR, 2015, p. 18). As reported by the Steering Committee for the Review of Government Service Provision, “across all subjects and year
levels ... there was virtually no change in the proportions of [Indigenous Australian] students achieving national minimum standards for reading, writing and numeracy from 2008 to 2013” (OID, 2014, p. 2, 19; CGPMR, 2015, p. 5).

Target number 3, to secure access to early childhood education (ECE) for all Indigenous 4-year-olds by 2013, was not met (CGPMR, 2015, p. 5). By the end of the specified timeframe, the rate of Indigenous preschool enrolment in remote communities was 10% lower than the 95% benchmark set by the Council of Australian Governments (COAG) (CGPMR, 2015, p. 10). By comparison, the national rate of non-Indigenous preschool enrolment was 90.8% in 2013, 4.2 percentage points lower than COAG’s benchmark for Indigenous 4-year-olds (OID, 2014, p. 4.18). Target number 5, to halve the gap for Indigenous Australians aged 20-24 in Year 12 attainment or equivalent rates by 2020, is stated to be on track (CGPMR, 2015, p. 5).

The Federal Government’s ‘Closing the Gap on Indigenous Disadvantage’ policy framework does not consider a number of other indicators that have proven to be fundamental for evaluating positive life outcomes for Indigenous Australians, such as intentional self-harm, psychological stress, suicide, self-reported life satisfaction, adult imprisonment, and juvenile detention (Layard, 2014; OID, 2016, p. 8.36; Green & Minchin, 2014). A brief overview of these indicators reveals a significant deterioration in outcomes.

The hospitalisation rate for intentional self-harm for Indigenous Australians increased by 55.9% from 2005 to 2015, while the rate for non-Indigenous Australians remained relatively stable, resulting in an increase from 1.7 to 2.6 times the rate for Indigenous Australians compared with non-Indigenous Australians (OID, 2016, p. 8.42). The major risk factor for self-harm is psychological distress, and in 2014-2015 almost one-third of Indigenous Australians aged 18 years and over (32.8%) reported experiencing high/very high levels of psychological distress, 2.6 times the rate for non-Indigenous adults (OID, 2016, p. 8.35). During the period 2007-2012, the proportion of non-Indigenous adults reporting high/very high levels of psychological distress decreased by 1.2 percentage points to 10.8% (OID, 2014, p. 8.42). Green and Minchin (2014) have pointed out that mental health illness is one of the “leading driver[s] for the observed health gap between Indigenous and non-Indigenous Australians” (Green & Minchin, 2014, p. 2).

Between 2010 and 2014, the rate of deaths from suicide for Indigenous Australians was twice the rate for non-Indigenous Australians (OID, 2016, p. 8.42). In 2014-2015, suicide was
the leading cause of death for young Indigenous people aged 15 to 35 years and the second leading cause of death for Indigenous children aged 14 years and less (Georgatos, 2017). Between 2003 and 2012, levels of self-reported life satisfaction for Indigenous Australians “declined sharply” (Manning, Ambrey & Fleming, 2015, p. 15). Manning et al. (2015) declared that “[t]his decline is despite significant investment by all levels of Australian government in addressing Indigenous disadvantage and suggests that existing policies are having little effect” (Manning et al., 2015, p. 15). Inequality in life satisfaction was found to be greater for Indigenous than non-Indigenous Australians (Manning et al., 2015).

The national imprisonment rate for Indigenous adults was, as at June 2015, 13 times the rate for non-Indigenous adults (OID, 2016, p. 4.110). Between 2000 and 2015, the Indigenous adult imprisonment rate increased by 77.4%, while the non-Indigenous rate increased by 15.2% (OID, 2016, p. 4.110). The Indigenous population represents around 3% of the total Australian population, yet constitutes over a quarter (27.4%) of the adult prison population in Australia (OID, 2016, p. 4.110). In 2015, former Prime Minister Kevin Rudd claimed that “Australia is now facing an Indigenous incarceration epidemic” (Korff, 2017). The national detention rate for Indigenous youth aged 10-17 years, in 2012-2013, was 24 times the rate for non-Indigenous youth (OID, 2016, p. 4.115). Indigenous detention rates increased sharply between 2001 and 2008 (OID, 2014, p. 25).

In Western Australia (WA), over the 20-year period between 1991 and 2011, official statistics have revealed a steady and absolute increase in Indigenous unemployment, particularly among Indigenous people aged 15-19; the difference in life outcomes for Indigenous Western Australians has been widening relative to all other non-Indigenous residents. Despite some absolute improvements in educational attainment, life expectancy and income status, relative to the rate of improvement for non-Indigenous Australians little to no progress has been made to reduce the gap in Indigenous disadvantage.

The labour force participation rate among Indigenous persons aged 15 years and over was, as at June 2011, 21.9 percentage points lower (46.3%) than the rate among non-Indigenous persons aged 15 years and over (68.2%), and was coupled with a rate of unemployment 3.9 times higher (17.8%) than the non-Indigenous rate of unemployment (4.5%) (ABS, 2012). A decade earlier in 2001, the Indigenous labour force participation rate was 15 percentage points lower (50%) than the non-Indigenous rate (65%), and was coupled
with a rate of unemployment 2.6 times higher (19%) than the non-Indigenous rate (7.3%) (Western Australian Department of Indigenous Affairs [WADIA], 2005, pp. 61-65).

A decade prior to this, in 1991, the Indigenous labour force participation rate was 18 percentage points lower (47%) than the non-Indigenous rate (65%), and was coupled with a rate of unemployment 2.9 times higher (36.1%) than the non-Indigenous rate (12.1%) (ABS, 1993; WADIA, 2005, p. 62-65). Research by Dockery (2014), at Curtin University’s Centre for Labour Market Research, has confirmed that Indigenous WA residents in 2011 were “four times more likely to be unemployed than non-Indigenous persons, rather than three times more likely as was the case in 1991” (2014, p. 80). As a result, the level of disparity in labour force participation between Indigenous and non-Indigenous residents has reached an all-time (20-year) high, meaning the gap in employment outcomes for Indigenous WA residents is widening relative to all others.
Appendix 2: Survey

Quick Questions!

1. What are you doing now?
   - [ ] I go to school
   - [ ] I have a job
   - [ ] I am training
   - [ ] I am looking for work or training

2. What is your dream job?

3. Do you know about “green” jobs?
   - [ ] Yes
   - [ ] No
   - [ ] Unsure

4. Did SMYL teach you about “green” jobs?
   - [ ] Yes
   - [ ] No
   - [ ] Unsure

5. Are you doing any “green” jobs at work or training?
   - [ ] Yes
   - [ ] No
   - [ ] Unsure

6. Are you interested in having a “green” job?
   - [ ] Yes
   - [ ] No
   - [ ] Unsure

7. Will the future have more “green” jobs?
   - [ ] Yes
   - [ ] No
   - [ ] Unsure

8. Do you think SMYL should offer “green” jobs?
   - [ ] Yes
   - [ ] No
   - [ ] Unsure

“Green” jobs are jobs that care for the Earth and help reduce pollution and waste.

(Fiocco, 2014)
Appendix 3: Survey results

Q1) What are you doing now?
Answered: 155   Skipped: 0

Q2) What is your dream job?
Answered: 155   Skipped: 0
Q3) Do you know about "green" jobs?

Answered: 155  Skipped: 0

Q4) Which jobs do you think are "green" jobs?

Answered: 155  Skipped: 0

Q5) Did SMYL teach you about "green" jobs?

Answered: 155  Skipped: 0
Q6) Are you doing any "green" jobs at work or training?

- Answered: 155  Skipped: 0

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<th>Option</th>
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<tr>
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<td>37.42%</td>
</tr>
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</table>

Q7) Are you interested in having a "green" job?

- Answered: 155  Skipped: 0

- Yes: 18.06% (28)
- No: 23.23% (36)
- Unsure: 58.71% (91)
Q8) Will the future have more "green" jobs?

Answered: 155  Skipped: 0

- Yes 38.71% (60)
- Unsure 54.84% (85)
- No 6.45% (10)

Q9) Do you think SMYL should offer more "green" jobs?

Answered: 155  Skipped: 0

- Yes 60.00% (93)
- Unsure 39.35% (61)
- No 0.65% (1)
Appendix 4: Interview data

In Western Australia, what opportunities exist for low-carbon employment and training?

- Not many at this stage as it’s an emergent sector. Insufficient critical mass to support the funding for creating opportunities.

- Not much. Technology available is already in decline. As an example Portland and that huge factory that they’ve established to build wind turbines. But at the moment, the two parties cannot agree as to what the commitment for reduction. One figure is 32,000 and the other one is 33.5. You think the difference is not that big. But the outcome of that is that this factory is shutting down because there is no prospect – there is no need to come up with these technologies. Which is wind turbines. Photovoltaics have picked up just because people have taken the initiative. While a wind turbine is a much bigger investment that households cannot do. Some farmers have done that in the past, but it’s still a very big thing. So it is a very – that whole area of renewable technologies is very difficult in Australia.

- The issue for us at the moment is that under the training system we have in Australia, training can only be delivered if it’s certain packages. The packages in Australia, the vocational training packages, reflect old industry, so there’s very little that people can actually deliver, that reflects new, innovative industry. New, innovative industry that probably hasn’t been thought about yet or constructed. The problem with that is that in terms of opportunity, the opportunity is being lost in WA because given our natural environment, we should lead the way in renewable energy in all kinds of bits and pieces, and we’re not.

- For indigenous employment and training? From my experience… Minimal. This is one of the main driving forces behind Wilco Electrical. We want to create opportunities for indigenous individuals whether it be an electrical apprenticeship, project management or trade assistant.

- We’re not seeing a lot of promotion for opportunities for indigenous people in this sector. Wilco Electrical are inspired to be leading the charge but first, we need the capability. This is our biggest challenge as the renewable energy sector is very competitive. Everyone is jumping on board with many sole traders popping up. With the slowing of the WA economy, business in this sector is tough however we are enjoying the challenge. We thrive on finding solutions for the difficulties we face.

- They exist, a question of how big can you make it?
- Range from existing programs to whole new initiatives e.g. people in southwest are starting to turn disused farming back into original landscape (revegetation/restoration).
- Cultural trails, Tourism
- Employment itself is sustainable because it generates something that somebody is going to want to buy.
- Managing land in such a way to generate carbon credits is a possible avenue for consideration given their trade value and ability to be exchanged.
- Opportunities in Coral bay…
  - Tourism;
  - Innovation and local expertise needed to solve water supply and sewerage disposal issues.

**Comment on the training of Indigenous people for new low-carbon opportunities.**

- We are looking at the training of indigenous people but there is also a need for non-indigenous people to be trained in traditional knowledge from an appropriate cultural context.
- The Vocational Training and Employment Centre (VTEC) model
- A problem with the term ‘Low-Carbon’ itself is that is interchangeable with many different meanings or understandings. This makes it confusing for knowledge holders as they are unsure what it means and whether or not they are providing said training and opportunities in the work that they do.
- We don’t have a training infrastructure to train up the community. That has implications for the indigenous community who are always left behind. If you look at the current economic system, indigenous people are completely underrepresented, undertrained, under-employed, so when we grudgingly pick up - and Australia and Western Australia will be forced to adopt low-carbon technology and low-carbon economy - the problem we have is that because we have no capacity now to bring people along with us, those most marginalised are going to actually end up missing out almost completely.

- Indigenous people will completely miss out accessing low-carbon economies because there is no structured way of providing the skills, the innovation or the requirements to prepare people up for those jobs. I think that what’s clear is that the level of sophistication required to enter a new economy will be higher than it is now, the level of skills one will need will generally be higher. We are looking at an
economy that’s going to be more high-skilled, hopefully better paying, less laborious, which poses a real problem for the indigenous cohort in that they languish at the bottom of the economic system and there is no formalised processes in Australia to bring them up to any kind of process, let alone to new and innovative ways of doing business.

- History tells us indigenous people are always the last ones to participate in this stuff, it’s always generally an afterthought when no one else is left. The longer we leave that without addressing it, the bigger the skill gap becomes and we’ve seen with the resource sector where resource companies just walked away from communities because they were too hard. It’s easier to use fly-in people, indigenous people, from all over the country than to train people in their own communities and so with a new economy, which will happen, the question is going to be: how do you get indigenous people who currently can’t access the labour market, who can’t access them, how do we get them to access something even more innovative? It requires a high level of skills and a different set of skills.

- The privatisation of a job network, the privatisation of training, it’s hit and miss. There is no strategic structure or mechanism to address the structural racism and the structural imbalance that exists in Australia. In the last decade we’ve moved away from addressing structural inequality into privatising programs that somehow have got to respond. So while there’s huge opportunity, most indigenous people will be left languishing and not participating because they have no way of accessing the mainstream economy and mainstream jobs. Once we go into more technically advanced, more innovative and creative ways of thinking, the gap gets even bigger and there appears to be no current structure or recourse to address that gap.

- The approach to indigenous training and employment is on the basis that it is only real if it generates something that has a market, because in tough times people pull back that sort of public expenditure on stuff which isn’t universally seen to be adding value.

- Self-employment or involvement in Indigenous run businesses is best approach as a greater return for the local communities.

- The training and employment of indigenous people, in my experience, the sustainability in that employment, is really dependent on the recipient having realistic targets to strive for, things that are very tangible and real to them. In my experience this is the only way that people develop, the resilience to hold down employment.

- Training people into apprentices is one of the really critical things because a tradesperson’s got lots of opportunities - I mean having a well paid career, they generally, if they’re inclined to run their own business as such. The skills tend to be transferrable. A Lot of people who start as trainees or either now in management roles or running their own business.

- In terms of improving training its about articulating ‘what’s in it for me.’ If this can be adequately expressed then training/support needs needs will become clearer.

- We need to see more action in the sector. Especially the promotion of training opportunities to the wider indigenous community. We know that the State and Federal
governments have set targets, which is good to see, but more must be done. The recent reports on the NT intervention deemed the whole process a failure. The recent revised reports of the Closing The Gap program are also very mediocre. We need to see more support for creating and promoting training and employment opportunities for the wider indigenous community.

**Comment on the employment of Indigenous people in your experience, including in low-carbon jobs.**

- Land remediation and management
- The mines that are closing down, the land rehabilitation needs, all the bits and pieces we need to do to turn broken country back into good country and that has its own economic impact: (a) for tourism; and (b) in terms of basic landcare, all the kinds of stuff that we require to fix up country that’s been destroyed through over-grazing, over-mining et cetera. That has intrinsic value in itself, the problem is trying to convince governments that it does have intrinsic value.
- Power generation especially in remote communities especially where enterprises are indigenous owned and run.
- If we’re looking at the kinds of stuff that’s emerging now technologically, there’s nothing to stop indigenous communities, corporations or people to decide that we’re going to set up power in our own communities. There’s nothing to stop an indigenous business deciding it’s going to go out there and it’s going to win the contract to basically provide cheap sustainable power in remote communities, that’s going to provide the training for it. So if the state government or federal government wanted to see real growth, they would be sponsoring, propping up and supporting a whole raft of indigenous entrepreneurs or organisations whose job it would be to address the power needs.

**How can employment and training for low-carbon jobs be made attractive to: (a) Indigenous people and (b) potential employers?**

- Secure employment, guaranteed economy, at present it is more specialized but when the training streams emerge, the VTEC model can easily be overlaid to ensure certainty.
- a) Jobs are attractive to people. I just think that we actually outline what they are and they’ve actually got to be attainable. One of the problems with talking about low-carbon and new jobs is that if they’re not there, people are going to get very jaded, so one of the philosophies that we’ve always had is that we won’t provide
training to people or get them into a program, unless there’s real work at the end of it, or half way to real work. So an indigenous community, once you explain to them, once you explain to anyone that ‘this is what the new jobs will look like’ oh they’re great. Their question will be then ‘Where do I get them? How do I get them?’ Given that much of this is going to be entrepreneurial and start-up and new, the question is well, you know, how do you not set up an unrealistic expectation? Timelines, explaining the timelines as to how this stuff is going to be introduced. Pointing out the potentials. I mean, the reality is to right now, at this stage of the economic cycle, the kind of jobs we’ll be doing in probably a decade, probably half of them we haven’t thought about yet or haven’t figured out yet, and they will flow from new and innovative technologies. So there’s that aspect to it which is change is always hard to explain because we don’t actually know it. We know that things will change, and we can say ‘yeah power technology and land,’ and the stuff that flows from that.

- a) Educate and promote that the opportunity exists. Just allowing them to experience that opportunity is one of my goals. People are trying out different jobs more than ever these days. If they can just get a taste of the experience then that is the first step.

- b) Creating a support network such as Supply Nation and Australian Aboriginal Business Directory are good. But more can be done. For example, at this year’s Supply Nation convention, it was the first time majority owned businesses could approach suppliers at their booths. Not the other way around as it had been in the past. These changes are great to see but long time coming.

**Are you aware of any successful examples?**

- As Polytechnic West cover a multitude of industries, there are a number of successful projects to date including placement of trained students at mainstream hospitals in Perth.

- Many years ago we basically looked at construction up in remote indigenous communities and how people were constructing properties and having to run diesel to power them.

- Probably 15 or 20 years ago - we set up a building team and they actually built what were then considered to be low impact, prefabricated homes which were cyclone rates as opposed to the stuff that at that particular time, was contracted to be built. It was done for about a quarter of the price, we then set up very primitive solar and wind generation systems which were okay for a year and a half, but in those days, batteries lived for six months and were heinously expensive and that was a problem. It was actually cheaper to run a generator than it was to replace the old lead batteries that simply could hold power for that long, but the new stuff is completely different.
We worked with Kalari, set up a whole lot in the Kimberley, different kinds of programs and projects; power distribution, setting up ongoing power in communities. The problem that has killed all of this, was that the technology was too expensive, it’s not anymore.

I’m aware of some Natural Resource Management (NRM) ranger programs, like at Wiluna. I was speaking to someone the other day and they’re saying how that’s probably a really good way for people in remote communities to train.

Having said that about remote communities, one of the things around the ranger program is getting people trained and employment opportunities to be rangers on parklands or national parks or whatever on traditional country. So they’re doing a whole heap of stuff around caring for country which would normally be done, but they’re actually doing it in such a way that puts it into a traditional context.

One important part of this program is where corporate executives are taken by the rangers into country. They do a whole range of activities at a particular site that they’ve chosen. They will take members of the public and show them around country, I guess, is the best thing and do activities in their area. They set up ablutions so people can actually camp there.

Rangers look after land and plants and animals. So it fits in with things like caring for country.

Around Perth? Unfortunately apart from Matera Electrical, no. but that’s not to say there isn’t. I’ve been head down tail up focussed and all things Wilco. Apart from Matera Group, I haven’t heard of any successful MOI renewable electrical contracting firms around Perth.

What are the existing barriers and what could be improved in both training and employment opportunities?

Cost of Training (BARRIER)

Government does make a contribution, or significant contribution, to the cost of training but notwithstanding that for a lot of people fees etcetera to be able to enter training, they are a barrier. It’s just a reality. So, that’s something, which could potentially keep a few people out of pursing some of those opportunities.

Critical Mass of Student Market (BARRIER)

A lot of these areas (Green Technology industry etc.) are what we term in our world ‘thin markets’ because they’re new, they’re small, there’s not hundreds of employers out there already lining up with jobs to go. So, for us to enter
into it, likelihood is you get entering in very small numbers of employment opportunities then you’re going to get small numbers of students and our funding models don’t lend themselves to that at all. It’s all about critical mass to be able to get viable class sizes and then you can pay your lecturers and do all that sort of thing. So again, it’s that ‘chicken and egg’ stuff about, do you wait until you’ve got critical mass before you can start training or do you find an alternative way to invest in training in some of these emerging low carbon type occupations while the numbers are still going to be pretty small and you back yourself in that it will grow? So, that’s for us, from a business point of view

Improving Thin Market Situation

○ What is a good model, or a potential model, is to invest in really good infrastructure, perhaps in one space, and then you actually get better value from flying people into that space to access it rather than trying to duplicate it in every jurisdiction. And I guess we’re moving towards that model in some of our areas where we have thin markets in some of our apprenticeship areas where there might be a specialist centre in one state and it’s actually much better value for everyone if the apprentice actually flies over to do their block of training rather than us try and have it here in Perth where we’ve got two or three students, then we have to pay a fulltime lecturer; it just doesn’t add up. So, perhaps a good little bit of thinking around the way that some of these specialist emerging industries might be tackled if there needs to be some infrastructure spent but it’s expensive new technology stuff, is to identify one jurisdiction where the training might take place and then look at other mechanisms to make it accessible to people from all over Australia.

○ That overcomes the thin markets in every jurisdiction issue, which governments everywhere are really grappling with. So, it might be that we can learn from declining apprenticeship markets as a way of solving the problem for emerging markets in this. And if turns out that those become thriving markets, well then there’s the case to build more of them elsewhere.

Technology Access/Investment/Financing (BARRIER)

○ Our ability to enter into some of these areas it will largely be a business decision and in our current budgetary environment, unless there’s some financial assistance to enter in to a thin market, it’s not something that we’re in the business of doing. It’s just everything’s too tight, so that’s just a reality that we face at the moment. So, they’re some of the business type barriers, perhaps, to getting in.

○ But when you’re starting to look at training for really high-tech, rapidly changing technologies where next year it’s all going to need to be upgraded
and updated as solar, or whatever it is, is evolving, then very, very expensive to have that replicated too many times.

- The cost of investing in really expensive infrastructure (setting up new programs) is prohibitive and then duplicating that in every state for very small numbers, it’s just not good value.

**Improving Access to Infrastructure**

- What that requires is that local jurisdictions need to - and again, this could apply to indigenous or non-indigenous participants, but if they need to access that infrastructure is to have mechanisms whereby they do get assistance to travel from wherever they are to get there and how that might work, we’ll leave that up to the policy makers. But there needs to be something to facilitate that because it’s unreasonable to expect someone in Perth to necessarily fly to Victoria; it’s just going to be too expensive, it won’t happen unless it’s their dream and they relocate there and do all that sort of stuff.

**Corporate and Social Responsibility an Improperly Utilised Mechanism (BARRIER)**

- My line is if you are in a 50D position you have to be able to do things that are cultural. So not just take the cultural leave that is part of our collective agreement, because that's everybody, but if you've only won a 50D position because of your Aboriginality and because of the special skills that you bring to the position through your Aboriginality and your connection with that culture, you need then to be able to use that, not just sit at a desk doing what somebody else in the desk next to you is doing because that means then that 50D was only, you know, a mechanism to get you in, it wasn't actual recognition.

**Fixing Corporate and Social Responsibility**

- Now we know that it's a mechanism to get you in, but that actual recognition, the, no, you've got to be freed up from some of the general task to do that, I think that's kind of the next space we've got to move to.

- I think it's a good extension for an opportunity for a RAP, Reconciliation Action Plans, that then people can take up. And that then isn't just an, impost is the wrong word, but an agreement or action that the workplace entity signs up to, but, importantly, the employee. If you've got to step in and keep that going yourself now, there's opportunity for here, use it honestly, ethically, outstanding integrity, and go forward on it.
Social/Financial Barriers (Remote Indigenous Communities)

Disadvantageous for those Living in Remote Indigenous Communities to get paid work (BARRIER)

- Employment’s always been an issue, employment and education – I talk about third space and our people. For instance, say as an example of employment – so someone’s living in a, let’s say, in Fitzroy Crossing. So it’s not a remote community; it’s a town. Living in Fitzroy Crossing. They’re in public housing and they’re encouraged to get a job. So they get a job as a teacher or in the mining company, so they’re earning too much income for public housing. Due to the income – they have to move out of public housing, but the income’s not enough to pay for a private rental and things like that, or even to buy a house.
- So people are discouraged, in that sense, from getting a job. Why would you get a job if it’s going to be economically disadvantageous for you to do that? You’re actually going backwards if you’ve got a job. Get the income, but your in-pocket money is not as much because you’ve got to pay higher rent. So there are quite a number of examples like that, particularly, particularly around education, where people are living in their own community and their jobs aren’t enough to pay for rental in towns. So why work?

Fulfilling Cultural Responsibilities (BARRIER)

- In terms of your employment or education, you don’t want – you can't have that compromising your culture in any way. So people who practice lore stuff, they’ve got to go out bush three months a year. Who’s going to let someone go three months leave a year unless you’ve got your long service leave that’s only available once every seven or ten years? Yet they’ve got to go out bush three months every year. So how do employers cater for it? They don’t.

Lack of Cultural Support/Adaptability in Training and Support following Completion (BARRIER)

- The way the school system is designed; it’s designed by the dominant culture. So we have particular rules that don’t take into account indigenous cultural needs.
- Indigenous kids who receive scholarships to study come to school and go through school and participate in sporting programs, all this sort of support, and music and all these really good things to support them while they’re in school. Then they go home and some of them can’t deal with the difference in terms of lifestyles at home and lifestyles at school.
- Additionally they are alienated from their community who see them as too far adapted to mainstream culture.

Lack of Funding for Programs/Stymied Innovation (BARRIER)

- The NRM camp given as a successful example before is just one example of a good program struggling to get government funding. The problem is that there is
less money allocated and more bureaucratic processes required to qualify for what little there is available.

- Part of the problem is also the restrictions on innovation in government departments. Decision making is strongly regulated and little room for giving new ideas a proper trial. As a direct opposite innovation in academic institutions is encouraged making trialling new programs easier except that they are restricted by the need to go through a similar bureaucratic process to gain approval.

Financial barriers (Indigenous Entrepreneurs in Remote Communities)

Failure of Current Economic system as a Means of Investing in New Ideas (Indigenous Entrepreneurship) (BARRIER)

- The current economic system is structured in such a way that if I go to a bank to borrow money, I’ve got lots of property, lots of assets, I have much money behind me. The bank will say ‘Let’s look at what you’ve got. Great, you’re not a high risk. I mean if we lend you a million dollars or $2 million for business, you have a house, you’ve got a car. You’ve got things we can sell off to get our money back. Here’s a loan.’

- Most indigenous people, (remembering the history of land ownership for didn’t start until 67), have no assets. There isn’t a strong asset base. So even though the person at the counter may not be intrinsically racist, the system and what it requires for people to be able to play, they can’t have. So the difficulty in indigenous people getting business start-up money is nigh on impossible.

- What you need to run a business… you need a good idea, but then you need capital and it’s the lack of access to capital which basically destroys indigenous entrepreneurship.

Solving the Problem

- Governments to provide funding of funding that says ‘We’re going to help aboriginal enterprises do that’ and not only that, we’re going to train them. We’re going to provide them business mentoring. We’re going to provide all the bits and pieces to make sure that this has the highest possible chance of working and sometimes it won’t work, but that’s okay. A lot of businesses fall over, but we’re going to make sure that we give people the best opportunity to make this work.’ Now at present that doesn’t exist.

Social barriers (Case Study: Native Title and Resource Companies as Indigenous Employers)
The ‘Bare Minimum Mentality’ (BARRIER)

- With Native Title there is this question between a business approach and a policy approach. The Native Title Agreement, it was a law that the companies must do so much for remote indigenous communities and they think ‘Well if I have to do this, I’ll only do the minimum amount possible.’

- So the problem with these companies is that by their nature they’re not visionary, they’re not long-term thinkers, they have no morals and scruples. They do the bare minimum.

- To expect them to actually have any sort of commitment to anything, it’s just not there. This whole notion of ‘ethical business’: business by its nature is not ethical. Business by its nature, is to make money and knowing that, I think the future for indigenous people isn’t in the resource sector.

Racial Discrimination in the Industry (BARRIER)

- A serious problem in the camps where there’s a certain makeup of fly-in/fly-out workers that come from lower socioeconomic backgrounds generally, low education levels anyway, and you know, casual racism is par for the course. It’s not even casual, it’s just racism. So the perception of indigenous people coming in from the community and getting the same paid jobs - so it created all kinds of tensions. Part of it is the mining companies do only what they have to, but at the end of the day, you can’t get away from the fact that racism is alive and well in Australia.

Business-Type Barriers (Industry)

Connecting with the right individuals (BARRIER)

- One of the biggest existing barriers is connecting with the individuals who are passionate about being a part of their company’s obligation to engage with Indigenous owned employers or employees. (Projects awarded equals more opportunity).

Red Tape and other Bureaucratic Issues (BARRIER)

- On top of this, once those individuals are found, there can often be red tape and bureaucratic policies that slow progress for engagement.

Solving these Issues

- Improvements I’d like to see would be – Process of connection with the right people becoming more streamlined.

- Reducing policies that discommode progress.
Business-Type Barriers (Industry)

Lack of Capital (BARRIER)
Lack of Business Experience/Training (BARRIER)

- Indigenous businesses are not usually short of enthusiasm, but business experience they struggle with. They struggle with some of the decision-making that’s required in business. The most successful Indigenous businesses are based around one person who, once it gets bigger than them and a small number of people, it generally doesn’t work so well. That’s just a lack of experience and proper on-the-job training.

Lack of specific on-job Training (BARRIER)

- Training bodies are actually very poor at providing this because they don’t know what a business needs. Training tends to generate qualifications, which may, but mostly are not useful. Indigenous Australians are the most over qualified, under employed group.
- This is because there are very few jobs outside public sector, which are too concerned about the shape of the qualifications. More concerned on what you can do and what you have done and if you have neither than a piece of paper holds very little value. Some exceptions to that rule such as trade qualifications, but you can only access these through the apprenticeship system and by doing the work and fulfilling the training requirements.
- Accessing apprenticeships is difficult for indigenous trainees as those apprentices need help outside the training system to progress and there is no one with the appropriate cultural knowledge or context with whom they can talk with. This is critical towards building self confidence and the knowledge that individual can succeed.

Solving On-Job training Issues

- It is up to the employer not the trainer to provide specific on-job-training in relation to the jobs they want the indigenous employee to undertake. They have the most knowledge and experience regarding what is needed.
Is there anything else that we have not covered in relation to job opportunities and training for Indigenous people for a low-carbon economy?

- We’ve turned indigenous Australians into a quiet class that makes an enormous amount of money for everyone else very little of that money goes to them. So you hear people say ‘Oh Indigenous money, all this money gets spent on them.’ Well it all goes to businesses that make lots of money out of them, it doesn’t go to Indigenous people because they’re the poorest people in the country, probably the poorest people in the world.

- We need to find a structure or a mechanism to enable indigenous people to access and utilise these resources, to allow for skill development. Once again it comes down to skills, education and training. Without that done properly, people can’t read or write. If they’re too unhealthy to work a day etc. then those impediments need addressing.

- A low-carbon economy that respects indigenous culture sits very well with indigenous communities. It’s respectful, it’s not exploitative and it’s not destroying country. It’s maintaining what’s there, so that would tick every box of what people want to do, but the question is, how we then move into getting people skilled and trained and funded to provide those services.

- At present the government will only fund training if it leads to a job that currently exists. So for example, they will only fund training if it’s for like a grader operator or something that exists. The capacity to have education should always drive thinking, but it’s not. Even with universities, we’re seeing it as becoming reactive to the economy, to the market. The problem is this stifles growth and innovation. So when we look at the new, emerging technology, when we look at the new economy, what will happen is someone will do it et cetera and then three or four years later, the training system will respond with something like ‘Oh well, we need to provide training in that area.’

- Where we get frustrated is that indigenous people need training now to be able to access - not just training, they need a whole raft of structure to be able to access what’s going to happen. We know that under the current way training is funded, it will always be reactive, it will be after Western Power or someone’s gone and developed a new technology. They’ll then develop the training to feed that in, but it won’t be innovative - so it’s always after the event.

- What’s lacking in Australia now is just imagination. Rather than people sitting around at TAFE or University going ‘Well the economy in 10 years, what’s it going to look like? Well it could look like this, this and this.’ Okay, what do people need? They need this, this and this. Then that’s what we’ll provide. The training system simply responds to preconceived market conditions that are becoming more and more out of date.

- The future isn’t going to look anything like it did in 1977. It’s going to be completely different and the only way they’re going to compete is having people that are flexible, innovative and can respond to that.
I’d like to see additional funding for education regarding obligations for engagement of indigenous companies and employees directed towards those who are in a position of power. From my experience, there still seems to be too many turning a blind eye. The more people that get behind and support engaging with MOI companies and individuals, the more we will see improvements in closing the gap.

Appendix 5: Workshop data

Community Workshop:

“Yarning Green Ideas for the Future”

Participants responded to survey and interview findings and barriers

- Lack of business experience/know-how
- Independence and self-determination
- “Decolonising” centralised funding system
- Independence from government
- Education systems approach to teaching Indigenous youth
- Major assumption: Green jobs are technically too high-end
Appendix 6: Forum data

Session 1: Describe your view of what an ideal ‘green future’ would look and feel like, if it respected Aboriginal history, culture, skills and care for country.

A
Adopt energy forms that are self-sufficient, do not rely on extraction of resources and do not damage land and cultural significance of places.

B
A future where water is clean and plentiful.

C
A green future where Aboriginal history and culture are acknowledged and respected and traditional knowledge is taken into account.

D
Green future based on leadership and active participation of Aboriginal people.

E
A harmonious environment based on mutual respect between individuals and industry.

F
Education for sustainable future that includes Indigenous ecological ethics and values.

G
Indigenous people having access to training, resources and mentors.

H
A future that focuses around caring for country, prosperous economies without destroying the earth.

I
Investment are made in consultations with Aboriginal people.
Session 2: Describe a success story of Aboriginal employment (especially youth employment) you have experienced or heard about – and what we can learn from that story.

A
Ranger Programs: North East, covering a lot of what we are talking about today. Surveying; Employment as well, taking care of sites, sharing culture. We should learn that traditional owners care for their own land, what better way than to employ them in that.

B
Son went through SMYL and training with Crown works as security guard, mentoring and supportive program, training good including follow up.

C
Young Aboriginal man was encouraged to achieve and aim for the stars. An in school education advisor encouraged the young man and he is now a chef in a success business.

D
Crown did chef training - supportive program, found placements, provided accommodation and mentorship in the program.

E
Aboriginal Mother was successful in winning a job, and her determination got her a better job. This she then used as a strong role model to help her son achieve in life too.

F
From the Wadjimup project we can learn: The incorporation of Aboriginal mentality is not going to be a detriment, it will be of beneficial. Outcomes: we put in a footpath of natural resources. Put it in so people would not walk over.

G
Project at Wadjimup: Rottnest Island: Rural Ground Recognition Project. Employed 7 young aboriginal young men, traditional owners, in a place of significance. Basically the highlight of this was knowing what we were going to do with the land. Example: smoking ceremony each night incorporated as much of our cultural knowledge as we could, cosy up the area to doing our work, and doing the community aspect for us. Over the whole project, we had 7 guys who had never worked with us before, and then we took them through all the training, the

H
Chevron’s Aboriginal conservation program (metro area) Green Australia: Young folk outdoors, on country, involves elders - opens doors.

I
EMC off grid instalts of large solar in Pilibara region engaged Aboriginal locals as trades assistance brought in a Aboriginal supervisor to get people there, performance bonus if they got through the 11 days and Aboriginal supervisor was happy with their performance. review process culturally sensitive (first round of this successful, second round less successful 7 of 11 positive reviews but only 1 available).

J
As an adult you often have other adults as peer support. But sometimes as a child, and young person, your peer support can be a negative.

K
State Government Dept: Huge organisations, state organisations have given priority to Indigenous organisations, Allocates Quotes to that. Huge opportunity to aboriginal providers, the down side to that is the “feast and famine”. Great concept, but if we have lower risk that would be better.

L
Government projects would be better as a monthly spend, rather than a lump sum, which encourages more sustainable business models.

M
Trust is key. It can take years to build trust in a youth program and in community engagement.

N
"Translating" business plan / model into accessible visual language (Sino Steel) resulted in high Aboriginal youth engagement.
Family support is key. For Aboriginal family can mean extended family.

Mentoring is a key issue and community contact to prevent distraction.

This is about the former AFL player who after his contract was terminated joined a private aboriginal youth employment (crane company employing aboriginal youth). He was hired and today he is number one employee. The hiring process was accidental and the aboriginal leader who knew the young player gave information to the player and hire him. The key success factors are (a) hiring (b) mentoring. The mentor believes that this

At Broome: one company that comes to mind is Mama Buljin. In the Kimberlys, doesn’t have any mining royalties and oil royalties. They had to basically had to be self sufficient: they had no choice. What mama Buljin did was create enterprise, some gov funding, but they created the first aboriginal nursery. By a specialist with knowledge. Company which had no funding, survived! And thriving. Now has a service contract to look after 132. Looking into hybrid photovoltaic systems. It represents a success stories that can diversity, several industries. NOT reliant on mining. Not having one company.

School based trainee ships i.e. while kids are at school One day a week is part of success story e.g. SMYL

Going to work is a choice perspective mum and dad go to work kids understand concept.

Time needs to be earlier year 8 and 9 before engagement is lost. Earlier time gives better understanding of what work is and understand what is needed.

Kids who have gone on to success have experienced school based traineeships. Make sure that they are placed in culturally supportive work environment.

Young girl from Clontarf Engaged given work by staff, staff are committed to help people learn. Staff commitment is essential.

Kanyirr Ninpa Jukurpa: Getting people out onto land, social investment, diverting people away from prison. Family is so important to Aboriginal culture, so it’s hard to be employed. This turns it on their head.

Gender needs to be considered. Technical renewables jobs should be ongoing in community employment programs of funding from the state, just like education and health jobs.

Rockstar program. Real Opportunities Kids Starting. It put about 400-500 people into employment over four or five years. In an over heating mining level, that’s not that a big deal, but what we did well was identify talent. We identified talent. He came in as a trainee, he started getting feedback that there is a major guy who they didn’t want to let go into it. We looked into it, he did yr 12, had a kid, and was looking for job to pay bills. Role modelling. That had pipeline. In aboriginal people, we need to look for what people can do.

Parents can be excellent role models to see where they can get to in the future.

Consultative processes, sitting down talking with the old people, embeds connection and community validation.

Key success factor: Using local knowledge (eg food, seasons) Key success factor: Communication
Session 3: What additional ideas do you have for Aboriginal youth employment in the green economy?

A. Update the curriculum so it incorporates Aboriginal perspectives, offers links to the green economy, provides real-world training for indigenous people and immediate post school employment.

B. Support transition between school and work that encourages entrepreneurship.

C. Support local people in remote areas to manage power, water and other services.

D. Build a bridge between Sustainable Development Goals and Aboriginal aspiration.

E. Foster economic empowerment based on on-country learning and traditional knowledge.

F. Provide youth training about caring for country.

G. Include Indigenous monitoring and reporting on land use and remediation in mining areas.
Session 4: What are the potential barriers to Aboriginal youth employment in the green economy?

A. Stereotyping and discrimination.
B. Lack of innovative strategies to retain Aboriginal students.
C. Insufficient information about the education pathways targeting the Green career sector.
D. Inadequate financing of educational and training programs.
E. Promoting and understanding green jobs.

Session 5: How can we overcome these barriers?

A. Building relationships and crossing bridges between people, industry and government.
B. Encourage Aboriginal mentoring.
C. Promote advantages of employing Indigenous people.
D. Reforming the constitution.
E. Promote cultural awareness and provide training to key people in the workplace.
F. Incorporate cultural specifics into the workplace systems.
Session 6 – Specifically, how can industry and government work better with educators to help prepare Aboriginal youth for green jobs (There were so many good ideas, they could not be themed and as such, are all listed below)

- Industry needs to educate the educators about new laws that allow state government to streamline Indigenous-owned companies to procure jobs
- Educators need educating- need to better understand the industry- have regular industry experience
- Futuristic discussion on where the industry will be - planning for the long term, and planning for career progression - bringing the gap of education and industry development - ensuring relevancy
- Provide green job apprenticeships, internships and work-placement.
- Green job apprenticeships, internships, placements from year 10+
- Aboriginal companies need to be able to offer apprenticeships
- Engage Aboriginal youth in defining what interests them in green jobs and how they can actively participate.
- Planning from the bottom up- start with youth - change embedded mind sets.
- Support Aboriginal culture throughout school - rich Aboriginal schooling about Aboriginal culture, to support identity and connection with culture
- Ask Indigenous youth what interests them in terms of green jobs
- Government to provide grants to Aboriginal economic development (changing government policy)
- Holding people on senior leadership positions accountable for RAPS outcomes. In educational and government bodies.
- To be an employer of choice, invest in resources to attend and engage in community events. Valuable to understand what matters for Indigenous employees.
- Traineeships for Indigenous Youth how to make better needs to have significant thought and discussion. How to set up away from the Wadjella way. Engagement with the indigenous community as part of the planning process
- Changing workplace culture improving acceptance for diversity constant monitoring and encouragement by employers
- Government helping Aboriginal businesses to hire Aboriginal youth
- Identifying why apprenticeship uptake isn’t very high. - Educational level, recognition of indigenous RPL.
- Find out where we lose the kids from the age of 12 onward, and then work out how to support them
- Support Aboriginal education facilities
- New technologies like drones are changing the way we do work. Engage with Indigenous people and youth for ideas on how traditional skills and knowledge can be used to improve our approach in traditional work practices.
- Viewpoint for employee progression where will they be in the future. Identify wants and needs. Make sure they have these pathways open to them.
• To try and minimize Classroom training and get them in workforce as soon as possible rather than excessive classroom training. On job training opportunities so learn as they are working.
• Move to become less and less dependent on Government to release them from excessive compliance matters and swift radical policy changes.
• Identifying why apprenticeship uptake isn’t very high. - Educational level, recognition of indigenous RPL.
• Aboriginal Lands include major valuable R&D assets in clean sky, wind, oceans, & sun. Invest in training on land Research Officers assisting new energy innovation R&D.
• Comprehensive program to address serious social issues such as suicide, alcohol and drugs, before employment program
• Define and include "green" jobs in school based career expos. What are the green job career pathways?
Appendix 7: Ethics Approval

SHR Project 2016/120 - Ethics clearance (Expedited approval based on Curtin University HREC approval, ref: HR 209/2014)

Dear Paul,

SHR Project 2016/120 – Indigenous participation in a low-carbon economy 
A/Prof. Kurt Seemann, Mr Paul Fiocco - FHAD
Approved Duration: 08-08-2016 to 31-03-2018 
(Curtin University HREC ref: HR 209/2014)

I refer to the application submitted on behalf of A/Prof. Kurt Seemann for Swinburne ethics clearance for the above project.

Relevant documentation pertaining to the application, as emailed on 28 April 2016 with attachments, and subsequent clarifications/revisions sent on 01 August 2016, was given expedited ethical review on behalf of Swinburne's Human Research Ethics Committee (SUHREC) by a delegate significantly on the basis of the ethical review conducted by the Curtin University Human Research Ethics Committee (ref: HR 209/2014).

I am pleased to advise that, as submitted to date and as regards Swinburne, ethics clearance has been given for the above project to proceed in line with standard ongoing ethics clearance conditions outlined below and as follows. The Curtin University HREC may need to be apprised of the Swinburne ethics clearance.

- All human research activity undertaken under Swinburne auspices must conform to Swinburne and external regulatory standards, including the National Statement on Ethical Conduct in Human Research and with respect to secure data use, retention and disposal.

- The named Swinburne Chief Investigator/Supervisor remains responsible for any personnel appointed to or associated with the project being made aware of ethics clearance conditions, including research and consent procedures or instruments approved. Any change in chief investigator/Supervisor requires timely notification and SUHREC endorsement.

- The above project has been approved as submitted for ethical review by or on behalf of SUHREC. Amendments to approved procedures or instruments ordinarily require prior ethical appraisal/clearance. SUHREC must be notified immediately or as soon as possible thereafter of (a) any serious or unexpected adverse effects on participants and any redress measures; (b) proposed changes in protocols; and (c) unforeseen events which might affect continued ethical acceptability of the project.

- At a minimum, an annual report on the progress of the project is required as well as at the conclusion (or abandonment) of the project. Information on project
monitoring, self-audits and progress reports can be found on the Research Intranet pages. (However, formats required by or submissions to the Curtin University HREC in this regard may be acceptable all things being equal.)

- A duly authorised external or internal audit of the project may be undertaken at any time.
# Memorandum

**To**
Professor Dora Marinova, Humanities

**From**
Professor Peter O’Leary, Chair Human Research Ethics Committee

**Subject**
Protocol Approval HR 209/2014

**Date**
5 November 2014

**Copy**
Angela Rooney, Humanities
Phil Webster, Humanities
A/P Kurt Seeman
Paul Forco
Hon. Tony McRae
Ashley Garlett

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Thank you for providing the additional information for the project titled "ARC Linkage Project: Indigenous Participation in a Low-Carbon Economy (LP120200712)". The information you have provided has satisfactorily addressed the queries raised by the Committee. Your application is now **approved**.

- You have ethics clearance to undertake the research as stated in your proposal.
- The approval number for your project is **HR 209/2014. Please quote this number in any future correspondence**.
- Approval of this project is for a period of four years **06-11-2014 to 06-11-2018**.
- Your approval has the following conditions:
  1. Annual progress reports on the project must be submitted to the Ethics Office.
- **It is your responsibility, as the researcher, to meet the conditions outlined above and to retain the necessary records demonstrating that these have been completed. See: Western Australian University Sector Disposal Authority (WAUSDA)**.

Applicants should note the following:

It is the policy of the HREC to conduct random audits on a percentage of approved projects. These audits may be conducted at any time after the project starts. In cases where the HREC considers that there may be a risk of adverse events, or where participants may be especially vulnerable, the HREC may request the chief investigator to provide an outcomes report, including information on follow-up of participants.

The attached **Progress Report** should be completed and returned to the Secretary, HREC, C/- Office of Research & Development annually.

Our website [https://research.curtin.edu.au/guides/ethics/non_low_risk_hrec_forms.cfm](https://research.curtin.edu.au/guides/ethics/non_low_risk_hrec_forms.cfm) contains all other relevant forms including:

- Completion Report (to be completed when a project has ceased)
- Amendment Request (to be completed at any time changes/amendments occur)
- Adverse Event Notification Form (If a serious or unexpected adverse event occurs)

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**Western Australian University Sector Disposal Authority (WAUSDA)**

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Yours sincerely,

Professor Peter O’Leary
Chair Human Research Ethics Committee
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