National Career Development Learning Hub for Students with Disability

Final Report

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Abbreviations

ADCET	Australian Disability Clearinghouse on Education and Training
ADHD	attention-deficit/hyperactivity disorder
CDAA	Career Development Association of Australia
CDL	career development learning
EALD	English as an additional language or dialect
HREC	Human Research Ethics Committees
NCIP	National Careers Institute Partnership
NCSEHE	National Centre for Student Equity in Higher Education
NDCO	National Disability Coordination Officer Program
RRR	regional, rural and remote
SDG	sustainable development goal
SES	socioeconomic status
STARS	Students, Transitions, Achievement, Retention and Success
UDL	Universal Design for Learning
UNSDG	United Nations Sustainable Development Goals
UTAS	University of Tasmania
UOW	University of Wollongong
UN	United Nations
VET	vocational education and training
WIL	work integrated learning

Executive summary

The National Career Development Learning Hub for Students with Disability project (2021–2023) funded by a National Careers Institute Partnership grant (NCIPI000759) investigated the nature of career development learning (CDL) for students with disability in Australia. The project aimed to critically engage with existing good practice in CDL and then and then complement what already exists by developing, piloting, and showcasing further examples of best practice programs and resources, which are acknowledged as those created with students with disability.The need for the project arose from growing and substantial evidence of weaknesses in the provision of career education, not only in Australia but across the world, including New Zealand and the United Kingdom. CDL has been criticised as being inadequate, outdated, of varying quality and quantity, and not equitably available within school settings. In Australia, people with disability are a group most in need of quality career education. When compared to the general population, people with disability experience multiple additional challenges to career planning and to accessing meaningful work opportunities. For example, young people with disability (age 16–25) are more likely to be in unstable employment, including periods of disengagement and unemployment; for university graduates, full-time employment rates are much lower, with a higher proportion of people employed in work that does not adequately utilise their skillset and education.

Inequitable employment outcomes highlight the importance of CDL as a basic human right, and the need to work proactively to ensure that all individuals reach their career goals. Equity is central to both national economic growth and the wellbeing of all Australians.

The overall goal of this project was to develop a suite of evidence-based resources with which to support Australians with disability to achieve their career of choice and learn how to adapt to the workforce of the future. This required a national approach to CDL for students with disability, taking a cross-sector and whole-of-student lifecycle approach to evaluate efficacy, impacts and outcomes. The project built upon national career research projects funded by the National Centre for Student Equity in Higher Education (NCSEHE). Thus, the four research aims were to:

- investigate the range of resources and programs that exist to support the CDL of students with disability
- critically engage with existing good practice and consider its validity in the light of changed contexts and educational challenges
- collaboratively develop and pilot examples of good practice across the post-16 educational environment
- disseminate and showcase examples of best practice to complement existing practices.

Each stage of the research resulted in key outputs, which comprise the CDL Hub resource.

Stage 1: Desktop audit of CDL programs and career interventions for students with disability across Australia and a review of key literature related to programs that support students with disability.

- Key outputs: audit of current practice (O'Shea et al., 2023a) background paper (O'Shea et al., 2023b)

Stage 2: Analysis of good[1] practice for students with disability. Stage 2 involved interviews with practitioners, students, carers and key stakeholders as well as analysis of secondary

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[1] 'Good' practice refers to practice that seems to work. However, 'best' refers to practice or principles which are based on extensive research, as reflected in the development of 'CDL Best Practice Principles' and the case studies which implement these evidence-based principles.

data from NCSEHE-funded projects and fellowships, and the EmployABILITY Thinking Initiative.

- Key output: CDL Best Practice Principles (O'Shea et al., 2022a)

Stage 3: Pilot programs undertaken by four Australian universities. Each university leveraged existing partnerships with schools, industry or community organisations to collaboratively plan, implement and evaluate the programs that represented best practice in their context. Stage 3 included the development of resources relevant to each program (CDL Hub resources (https://www.adcet.edu.au/cdl-hub).

- Key outputs: case studies of best practice
  - *Career development learning for neurodivergent tertiary education students*
  - *Redesigning work integrated learning placements to support students with disability*
  - *Building the capacity of career and accessibility practitioners to provide tailored career advice to students with disability*
  - *VET career pathways for school students with disability: Working with employers*

Stage 4: Dissemination of the CDL Hub resources and outputs (housed by established networks such as ADCET, myfuture, and others in negotiation). The CDL Hub resources are evidence-based supports that demonstrate best practice in CDL for students with disability. Dissemination was also undertaken through the CDL for Students with Disability symposium in February 2023, hosted at the University of Wollongong during Career Practitioners week and attended by over 331 staff from schools and universities. Together, the CDL Hub resources and outputs provide the CDL community with the knowledge and resources to implement best practice CDL for students with disability within their own contexts.

Key findings specific to students with disability are summarised in the following points and explored in depth within the report:

- There exist insufficient CDL-informed programs specifically tailored to different types of disability.

- At present, there is a lack of disability-specific strengths-based theory to underpin CDL specific to the careers of people with disability In terms of disability theory, approaches vary significantly with ableism being a problematic notion (linked to the medical model of disability).

- Employment inequity is widespread and includes lower levels of employment for people with disability compared to people without disability.

- Barriers and challenges in CDL include employer perceptions, risk of social isolation and exclusion, and a range of issues associated with the transition from education to employment.

- Early exposure to CDL yields demonstrable and positive outcomes.

- There is a need for specific data on types of disability in relation to CDL to ensure understanding and optimal workplace experience that emphasises the importance of meaningful careers, and the recognition and celebration of lived experience.

Recommendations

The research makes eight recommendations based on Best Practice Principles:

- Career development learning (CDL) should be led or developed by professional career development practitioners who support activity based on high standards of practice and ethical behaviour and who could be supported by knowledge and resources that are open access and housed within a hub.

- CDL programs and resources should be co-designed with people with disability to promote empowerment and agency, and to ensure quality, well designed outputs that broadly adopt the expertise and experience of people with disability; CDL activities should be self-directed and person-centred to identify and leverage the strengths and assets that the individual already has.

- CDL should foreground the development of each individual's strengths and capabilities; it should be embedded in personal perspectives of success that respect and develop the whole person.

- All CDL activities should be underpinned by the principles of Universal Design to be inclusive of and accessible to the broadest diversity of students possible. Well designed CDL activities that broadly consider removing barriers to access for students with disability will support easier access and engagement, and should be offset by the availability of high quality and skilled supports as required by appropriately skilled and knowledgeable professional practitioners, and be provided by appropriately skilled and knowledgeable professional practitioners.

- Career thinking, planning and decision-making initiatives should utilise a longitudinal lifecycle approach to CDL and should correlate with maturity and key decision-making points.

- To enhance student outcomes, CDL should be provided within disability-inclusive, anti-discriminatory partnerships between industry, students, families/supporters, educational institutions and government agencies.

- Respectful and equitable educational and employment contexts for students with disability should be created by employers, teaching staff and career practitioners who are disability confident, aware of unconscious bias issues and possess positive attitudes towards diversity and inclusion. Promoting CDL to employers can be through support to provide work placement/work integrated learning opportunities for students with disability.

- Anti-discriminatory, inclusive and accessible career information should be incorporated into all general career development materials to support awareness of CDL opportunities, resources and networks. It also promotes engagement with the networks for students with disability and their supporters.

Introduction

This document is the final report for the National Career Development Learning Hub for Students with Disability project, which was funded by a National Careers Institute Partnership grant (NCIPI000759) in 2020. Between 2021 and 2023, the project aimed to critically engage with existing good practice in career development learning (CDL) for students with disability[2] and then develop, pilot and showcase further examples of good practice programs and resources to complement what already exists.

This section provides an introduction to the project with a discussion of its context, aims and research design as well as its outputs and impact.

Context

There is growing and substantial evidence that there are weaknesses in the provision of career education across the world, including Australia, New Zealand and the United Kingdom, where such learning has been criticised as being inadequate, outdated, of varying quality and quantity, and within school settings, is inequitably available (Moote & Archer, 2018; Parliament of Victoria, 2018; Yates & Bruce, 2017). In Australia, there is evidence that career education in schools is shaped according to socioeconomic class, with those from low socioeconomic backgrounds having less equitable access to career-related support and resources (Andrews & Hooley, 2017; Atalier Learning Solutions, 2012). Research in the UK suggests that poor career provision may actually promote inequalities rather than alleviate them (Moote & Archer, 2018).

Australians with disability are a group of people who are in most need of quality career education. Young people with disability (age 16–25), are more likely to experience disrupted labour market movements, including periods of disengagement and unemployment, when compared to the rest of the population (Lamb et al., 2015; Ranasinghe et al., 2019). Poorer employment outcomes exist for graduates of higher education living with disability. In Australia, the full-time employment rates for undergraduates who reported disability were much lower than those without disability (58.7% and 70%, respectively) (QILT, 2021). Likewise, a higher proportion of graduates living with disability (46%) were in a job that did not fully utilise their skills or education, when compared with graduates without disability (42%) (QILT, 2021). These statistics suggest that Australians with disability require quality careers support.

Importantly, we need to work proactively to ensure that individuals reach their career goals, not only because of national economic benefit but also to promote equitable participation in the workforce of the future, in which it is anticipated that 9 out of 10 jobs will require a post-secondary qualification (National Skills Commission, 2022a). In fact, quality CDL should be recognised as a basic human right (CDAA, 2012) with the fundamental nature of CDL being reflected in the United Nations Sustainable Development Goals (UNSDG). There are 17 goals, adopted by all UN Member States in 2015, which are "the world's best plan to build a better world for people and our planet by 2030" (UN, 2020). Specifically, the eighth goal (SDG8) aims to "promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" (UN, 2020). This goal can be maximised by responding to SDG4, "inclusive and equitable quality education and lifelong learning

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[2] Note: In this report and other resources in the CDL Hub, we have opted for the "person-first" terminology of person or student "with disability" rather than identity-first language (e.g. disabled, autistic) (Young, 2022). However, we acknowledge that within the disability community there is a range of ways that people identify with disability or disabilities, which are "diverse and individualised" and that language around disability is "constantly evolving" (Young, 2022, n.p.).

opportunities for all" (UN, 2020). Quality CDL is a pathway to achieve these two important international goals (O'Shea et al., 2022b).

Furthermore, in the current health crisis, the need for quality CDL has been intensified. One of the implications of the global pandemic has been that people with disability and their carers are further marginalised in the labour market (Brown, 2020). Brown (2020) advocates for national policy intervention to provide effective, evidence-informed disability employment services in order to ameliorate the impact of COVID-19 on this vulnerable group. The most striking economic argument for the enablement of tertiary education and subsequent employment is that 9 out of 10 future jobs being created will require postsecondary education. Without meaningful intervention, it's likely people with disability will be left behind (National Skills Commission, 2022b).

Research aims

The overarching goal of this project has been to support more Australians with disability to achieve their career of choice and to equip them with the skills and knowledge to adapt to the current workforce as well as into the future. To achieve this, the research considered all stages of the educational cycle but placed particular focus on students with disability making the transition from school to vocational education and training (VET) or higher education. For students with disability, a national approach to CDL is needed – one that takes a cross-sector and whole-of-student lifecycle approach so that efficacy, impacts and outcomes can be evaluated on a national scale.

The purpose of this project, therefore, was to investigate and showcase good practices in the field of CDL for students with disability. The CDL Hub resources developed from this research will assist others in developing bespoke and contextualised approaches to support the CDL of students with disability.

The overarching question guiding the research inquiry was:

- What is best practice in CDL for students with disability?

To explore this, the aims of the project were to:

- investigate the range of resources and programs that exist to support the CDL of students with disability
- critically engage with existing good practice and consider its validity in the light of changed contexts and educational challenges
- collaboratively develop and pilot examples of good practice across the post-16 educational environment
- disseminate and showcase examples of best practice to complement existing practices.

Research design

This project builds upon existing national career research projects funded by the National Centre for Student Equity in Higher Education (NCSEHE) exploring ways to improve access to quality CDL for students and their parents/supporters from low SES backgrounds, Aboriginal and/or Torres Strait Islander students, and students from regional, rural and remote (RRR) areas (Austin et al., 2022; Dollinger et al., 2022; Kilpatrick et al., 2022. For details, see *Existing national career projects*). The approach taken was informed theoretically by pragmatism, which is concerned with the generation of useful knowledge that can assist in addressing practical issues or problems rather than adherence to one specific method or approach.

Given that the aim of the project was to develop best practices and resources (rather than individual CDL programs) to assist others in developing bespoke and contextualised approaches, a range of data collection methods was adopted. These methods unfolded over

four stages, which are outlined in the following table. Each stage of the project was overseen by an expert committee that met regularly to provide key insights on good practice and critically review key documents and project outcomes.

Table 1: Overview of research stages and activity

Stage	Purpose	Research Activity
Stage 1	Audit of career development learning (CDL) programs for students with disability	Audit of current practice Review of key literature
Stage 2	Understand good practice CDL for students with disability	Interviews and surveys with students, parents/carers and stakeholders Analysis of existing data
Stage 3	Trial good practice	Planning, implementation and evaluation of best practice programs
Stage 4	Disseminate best practice	Establishment of the CDL Hub CDL for Students with Disability symposium
Underpinning activity	Ensure that the project progression, conclusions and outputs were rigorous, representative and fit for purpose	Consultation and collaboration

Stage 1 involved an audit of CDL programs and career interventions for students with disability across Australia (Audit of current practice) (O'Shea et al. 2023a). Stage 1 also involved a review of key literature related to programs that support students with disability (Background paper) (O'Shea et al., 2023b).

Stage 2 identified good practice for students with disability via analysis of existing data sources and the conducting of interviews with practitioners, students/carers and key stakeholders. Data sets from NCSEHE-funded projects and fellowships and the EmployABILITY Thinking Initiative (Bennett, 2020) were analysed alongside interview and survey data to understand good practice for students with disability.

Stage 3 involved the planning, implementation and evaluation of four pilot programs carried out by higher education institutions across Australia. Four universities leveraged their existing partnerships with schools, industry or community organisations to collaboratively plan, implement and evaluate programs that represented best practice in their context. The pilot programs have been written up as case studies of best practice (https://www.adcet.edu.au/cdl-hub).

Stage 4 involved dissemination of resources and outputs of the CDL Hub and the hosting of the CDL for Students with Disability symposium. The CDL Hub resources are evidence-based supports that demonstrate best practice in CDL for students with disability. The symposium was hosted at University of Wollongong during the annual Career Practitioners professional development week attended by over 331 staff from schools and universities from across NSW and ACT, including 150 attending the on-campus workshops and 181 attending online. The symposium featured presentations by project investigators and partner universities from across Australia, as well as representation from a number of students with disability. Together, these initiatives provide the CDL community with the knowledge and resources to implement best practice CDL for students with disability within their own contexts.

The rationale for dissemination of the CDL Hub resources was informed by the research component of this project. Interviews and surveys conducted with stakeholder groups

indicated a risk of overwhelming students, families/supporters and stakeholders with a new site, recommending instead that existing information and communication channels be leveraged. Participants indicated the need for multiple access points for these resources rather than one central hub or repository. In response to this identified need, the project developed **a suite of evidence-based resources with the intention that these be disseminated to existing organisations, government departments and peak bodies for uploading to their websites and directed to their specific audience** (students, families/supporters, career development practitioners, teaching staff, employers and industry). These resources will be deliberately targeted to different stakeholder groups and provide practical tips and guidelines for immediate application.

Project outputs

This project delivered the following items:

- This **final report**, which details the method and outcomes of the project.
- A national audit of CDL programs for students with disability. The **audit report** is available online for download.
- A **background paper** that gives an overview of the context and key issues.
- A suite of resources that comprise the **National Career Development Learning (CDL) Hub** to support best practice CDL for students with disability. These resources have been disseminated widely to existing peak bodies, career services, institutions and websites for hosting and further dissemination to specific stakeholder groups.
- A series of four **case studies of best practice**. These reports are accompanied by supplementary materials such as lesson plans, student activities and online self-education modules.
- A symposium – **CDL for Students with Disability** – delivered in February 2023 for practitioners, researchers and those in disability policy, education and advocacy.

Overall, the project has contributed to the following outcomes:

- An **audit of existing CDL programs** for students with disability nationwide.
- The **building of the evidence base** on good practice for CDL.
- The **creation of a suite of resources to support** practitioners, educators, policy makers, and employers create contexts that can best support strong educational and career outcomes for students with disability.
- The creation of a variety of resources to support students and parents/carers in navigating education and the world of work.
- **Informing the establishment of partnerships** between industry, employers, schools and tertiary providers for the stronger collaboration in the delivery CDL.

This report details the methodology and implementation undertaken and draws together all of the activities and outputs of the research in one place. Where necessary, it provides further information via appendices or links to related documents. Given the breadth of findings, this report provides only an overview of the predominant themes with other findings to be explored in more depth through future scholarly works.

The next section provides a background to the project.

Background to the project

This section describes the background to the project, commencing with the educational and employment outcomes of people with disability and their lived experiences in relation to careers and the workplace. This section also discusses the role of CDL in supporting positive and equitable outcomes for students with disability in achieving their educational and career goals.

Benefit of and supports for diversity in the workplace

Disability is part of the range of human diversity, which contributes to the rich and fascinating world that we live in. People with disability have the same rights to participate in the world as everyone else. A right to equitable participation in education and employment for people with disability is enshrined in legal frameworks internationally, including Australia where this project was undertaken. As well as being a legal and moral imperative, the inclusion of people with disability in the workplace is valuable for economic and other reasons. However, Tinto (2008) argues that 'access without support is not opportunity' (p. 50), and that diversity comes with a downside if not appropriately embraced,

> *That institutions do not intentionally exclude students from college does not mean that they are including them as fully valued members of the institution and providing them with support that enables them to translate access into success.* (Engstrom & Tinto, 2008, p. 50)

This section discusses the importance of disability inclusion in the workplace from two perspectives: legal requirement and benefit to employers.

Federal legislation protects the rights of all Australians including those living with disability. In Australia, the *Australian Human Rights Commission Act 1986* gives everybody, including those living with disability, the right to economic and social security; protection against exploitation and discrimination; access to civil and political rights in equal measure; and the entitlement to have accommodations to enable self-reliance. Additionally, legislation makes it illegal for employers, businesses and organisations to discriminate against people with disability in relation to recruitment, hiring and employment. The *Disability Discrimination Act 1992* applies to workplace and educational settings. The *Fair Work Act 2009 s*peaks specifically to workplace settings. Discrimination can be direct; that is, the person with disability is directly treated less favourably than others. An example of indirect discrimination could involve the discriminator not making reasonable adjustments for the person with disability. Specific legislative protection for individuals with disability in the workplace includes protection against dismissal due to disability, denying an individual living with disability access to work promotions, and discrimination in the form of detrimental behaviour towards that individual. If for no other reason, employers must include people with disability due to legislative responsibilities.

Importantly, there is growing evidence that having diverse human resources, including people with disability, contributes considerable benefits to organisations. Many people with disability can offer a variety of in-demand skills gained from training (McLoughlin, 2018). The skills and perspectives that people with disability possess are valued by many employers (Kantar Public, 2017), and research indicates that inclusive organisations may financially outperform their non-inclusive competitors (Accenture, 2018; Lindsay, Cogliostro, Albarico, Moraji & Karon, 2018). Research also indicates that people with disability generally make committed, hardworking, honest and responsible employees (Lee et al., 2011; McLoughlin, 2018). Further, businesses might benefit from increased revenue as a result of employing individuals with disability as such practices "attract consumers with diverse backgrounds and those attentive to corporate social responsibility" (Kalargyrou & Volis, 2014, p. 432). Finally, accommodations that are made to support employees with disability are likely to reduce barriers in the workplace for all employees enabling an accessible and optimal working

environment for everyone, with resulting efficiency and employee satisfaction gains for the employer (Kalargyrou & Volis, 2014).

Employment outcomes for people with disability

People with disability are unequally represented in labour force statistics despite the benefits of diversity in the workplace and the anti-discriminatory legislation designed to protect the employment participation of those living with disability. People with disability comprise a much larger proportion of those not in the labour force (46.6%) compared to individuals without disability (15.9%) (Australian Bureau of Statistics, 2020).

Young people with disability in the labour force experience lower rates of employment compared to their peers without disability. The Australian Bureau of Statistics (2020) reports that in 2018, the full-time employment rate of people age 15 to 64 years living with disability was only 28%. This compares to the rate of 54.8% of young people without disability. Similar disparity was reported for part-time employment, which was at 19.6% for people with disability compared to 25.4% for those without disability. Underemployment for people with disability was also higher than for those without; it was 10%, in contrast to 5% for individuals without disability (Australian Bureau of Statistics, 2022). Even highly educated people with disability experience underemployment in higher proportions. Eckstein (2020) found that university graduates with disability are more likely, when compared to their peers, to be in jobs that do not use the skills and knowledge they developed at university. These patterns are not unique to Australia, with weaker employment outcomes for people with disability evidenced throughout the world (UN, 2007).

Intersectionality can create further disadvantage for people with disability. Intersectionality exists when a person with disability also identifies as belonging to other categories such as being from a low socioeconomic status (SES) background, coming from a regional, rural or remote (RRR) location, having English as an additional language or dialect (EALD) or identifying as Aboriginal or Torres Strait Islander. Intersecting equity categories potentially compound disadvantage, which can result in poorer outcomes in relation to education and work. For example, a 2019 study of Aboriginal and Torres Strait Islander people with disability found that 76% of respondents experienced discrimination due to their disability, and 60% experienced discrimination based on their culture or ethnicity (Australian Government, 2021). Intersectionality can indicate multiple barriers and layers of disadvantage. While age is not regarded as an equity category, it is worthwhile noting that maturity brings a higher risk of disability, adding to intersectionality.

Barriers to equitable employment for people with disability

The reasons for the poorer employment outcomes for people with disability are varied and complex.

People with disability often express difficulty in accessing the workforce as a result of employer confidence in, and attitudes to, disability. Despite many employers understanding the value of hiring people with disability, a lack of understanding about disability and ways of working with people with disability sees employers lacking in confidence or being fearful of doing the wrong thing (Australian Human Rights Commission, 2016). Employer hesitancy to hire people with disability might also stem from a perception of increased risk to other staff or the fear that it might impose additional costs on the business (Cunningham et al., 2014). Many managers lack training in diversity and inclusion, such as supporting flexible working arrangements and implementing workplace adjustments (Australian Human Rights Commission, 2016). The attitudes of co-workers towards people with disability and workplace adjustments can also present challenges, particularly when negativity pervades workplace culture (Australian Human Rights Commission, 2016).

Similarly, disclosure of disability is complex in the workplace (Cunnah, 2015) and can pose a barrier to equitable employment outcomes. Disclosure is where the individual living with

disability discloses their disability to their employer and/or colleagues so that appropriate accommodations can be made in the workplace and supports can be put in place (Adams, 2018; Lindsay et al., 2016). Some individuals choose not to disclose their disability because of fear of discrimination in the workplace (Adams, 2018; Australian Human Rights Commission, 2016; Cunnah, 2015) or because supports and accommodations are not necessary in that environment at that time (Barrow, 2013). The latter may be because the individual has an "invisible" disability and can manage their needs without additional assistance being provided (Barrow, 2013). However, the uncertainty about how disclosure of disability may be received can impact on the employment outcomes of these individuals, while also recognising that the freedom of choice in relation to disclosure is an inherent right of a person with disability (Australian Human Rights Commission, 2016; Cunnah, 2015).

Low expectations held by others towards people with disability from a young age can also limit the career (and life) potential of individuals. However, many students with disability "desire the opportunity to participate fully in mainstream society, to live their lives on equal terms with their non-dis/abled peers, and to be valued for themselves, with all of their human attributes and failings" (Irving, 2013, p. 1050). Despite this, in some situations, families and educational programs can constrain the success of students with disability by discouraging certain aspirations related to employment, education or personal achievement (Parliament of Victoria, 2018). Whether or not employment is secured, the construction of positive career identities from a young age is a vital step towards inclusion and career development.

Career development learning and positive career outcomes

Quality CDL can support equitable educational and career outcomes for people with disability. CDL involves learning about the content and process of career development or life/career management, including learning about self and about the world of work (McMahon et al., 2003). From a neoliberal perspective, CDL "can help to make the best use of human resources in the labour market as well as in education by allowing better matches between skills and interests and opportunities for work and learning" (OECD, 2019, n.p.). Thus, CDL is important for workforce participation and national productivity (Australian Government, 2013). Ensuring that all citizens have access to quality career development is also important for equity and achieving international sustainability goals including the UN Sustainable Development Goals (SDGs) (UN, 2015; O'Shea et al., 2022b).

Career support for students may include career counselling, career education, mentoring, work integrated learning, coordinated work experience or internship programs via range of modes and formats such as one-on-one, small group, web-based, large class and self-help material (CICA, 2019). Career practitioners assist young people to analyse the way they think about their careers. As practitioners, they "assist clients to understand and balance their multiple life-roles" (CICA 2022, p. 12) as well as "identify, and work with clients to overcome systemic biases that limit their career development" (CICA 2022, p. 17). Career advisers provide their students with access to employers and businesses that can offer valuable career advice and experience through work placements (McGrath & Murphy, 2016) or work integrated learning (Atkinson, 2021), school visits (Kashefpakdel, Rehill, & Hughes, 2018) and mentoring (McGrath & Murphy, 2016). Career advisers can make a significant impact on students' choice of school subjects and careers (Aspden et al., 2015).

However, across the globe, current approaches to career education have largely not succeeded in meeting the needs of young people, with current research citing inadequacies in career provision particularly in terms of accessibility for students from disadvantaged or marginalised backgrounds (Brown, 2015; Mann et al., 2020; Moote & Archer, 2018; Yates & Bruce, 2017). The recent Australian review of senior secondary pathways into work, further education and training states that "career advice nationally is inadequate" (Education Council, 2020, p.18). There are concerns about the quality, equitable delivery, resourcing, staff qualifications and training, and policy related to CDL in Australia. First, concerns about the quality of career education in schools include perceptions that it is outdated and does not

adequately prepare students for life after school (Parliament of Victoria, 2018). Second, the quantity of career education varies significantly between schools. One Victorian study found that 10% of schools spent 45 minutes or less on career education per student per year, and 10% spent 12 hours or more per student per year (Parliament of Victoria, 2018). Third, the policy framework for career education in Australian schools is fragmented and ineffectual (Australian Government, 2019; Parliament of Victoria, 2018) with neither the Australian Blueprint for Career Development (MCEECDYA, 2010) nor professional standards and benchmarking resources (CICA, 2014) being compulsory.

Universities are also increasingly adopting inherent requirements (IR) statements, which are are used 'to ensure integrity of academic courses [and] … as minimum standards for registration to practice' (Corcoran, Whitburn & Knight, 2022, p. 69), as well as playing a role in 'courses which involve work placement preparing graduates for employment' such as nursing or teaching (p. 70). As IR statements are likely to align to the medical model of disability which is prevalent in how institutions work with, and inform their dominant knowledges of, people with disability. In the medical model, disability is viewed as 'a burdensome condition for which biomedicine struggles to adequately respond' (Corcoran et al., 2022, p. 70). Corcoran and colleagues (2022) state that for students with disability, IR statements can be perceived as 'insurmountable obstacles' (p. 73), which can impact on how they conceive of the possibilities for their futures and whether outcomes will fulfil their desire. These kinds of practices can be exclusionary for students with disability especially when IRs inform and intersect with careers guidance. Again Corcoran and colleagues (2022) challenge the 'measure' of success of inclusive education, arguing that it cannot be reached 'unless the ways programmes of study are designed and implemented lead to equitable employment opportunities in a person's preferred profession' (p. 71).

Summary

To summarise the information on the background to this project, it is clear that despite the benefits of employing people with disability, inequities in employment still exist. Societal barriers such as 1) employer lack of confidence and negative attitudes towards hiring people with disability, 2) low expectations of people with disability and 3) tension around disclosure are all factors that impact the career outcomes of people with disability. CDL has the potential to support how students with disability can navigate these barriers and achieve career success. However, current weaknesses in the delivery of CDL mean that it is inequitably provided.

Best practices in CDL are needed in order to support the career development of students with disability so that they can participate equitably in the world of work. The following section outlines the overall project and how the activities undertaken sought to interrogate, understand and disseminate good practice CDL for students with disability.

Methodology

This mixed methods research engaged a total of 415 participants across the project (Stage 2 n=156, Stage 3 pilot programs n=259). Contributors included tertiary students with disability; parents and carers of students with disability (school and tertiary levels); teachers and educators; career and accessibility practitioners; advocates and leaders, employers and industry representatives. The inclusion of a wide range of stakeholders was an intentional designed-in element aimed at acquiring broad understandings of the issues and possible solutions. This section details the methods used to gather information across each stage of the project.

The approach taken was informed theoretically by pragmatism, as the focus was on the particular social and historical context of the issue under analysis rather than adherence to a particular method. Pragmatism lends itself to complex issues that need to be both inductively and deductively analysed (Creswell, 2007). By applying a range of approaches to data collection, the various elements of a field can be considered in more depth. Essentially, pragmatism is concerned with the generation of useful knowledge that can assist in addressing practical issues or problems. Combining analysis with consultation and researcher reflexivity enabled a more well-rounded understanding of what works within the career development environment and how we can work productively to improve existing practices and systems.

Given that the aim of the project was to develop best practices and resources to assist others in developing bespoke and contextualised approaches rather than individual career-related programs, the research team adopted a range of data collection methods. The project unfolded over four overlapping and iterative stages. Those stages are described in the following sections.

Figure 1 provides a visual overview of the stages and activities of the project.

National Career Development Learning Hub for students with disability

A project funded by the National Careers Institute

Collaboration and consultation

Expert working party meetings

Consultation with peak bodies

Key project activities

A national audit of existing CDL programs and career interventions for students with disability across the educational lifecycle

Identify principles for best practice CDL for students with disability

Trial a series of pilot studies based on best practice

Establish a national CDL Hub

Research tasks

Review of key literature

Audit of CDL programs

Stage 1

Analysis of extant data

Surveys and interviews with:
- Students
- Parents/carers
- Stakeholders

Stage 2

Evaluation of pilot programs via surveys, interviews and observations

Stage 3

Dissemination

Stage 4

Outputs

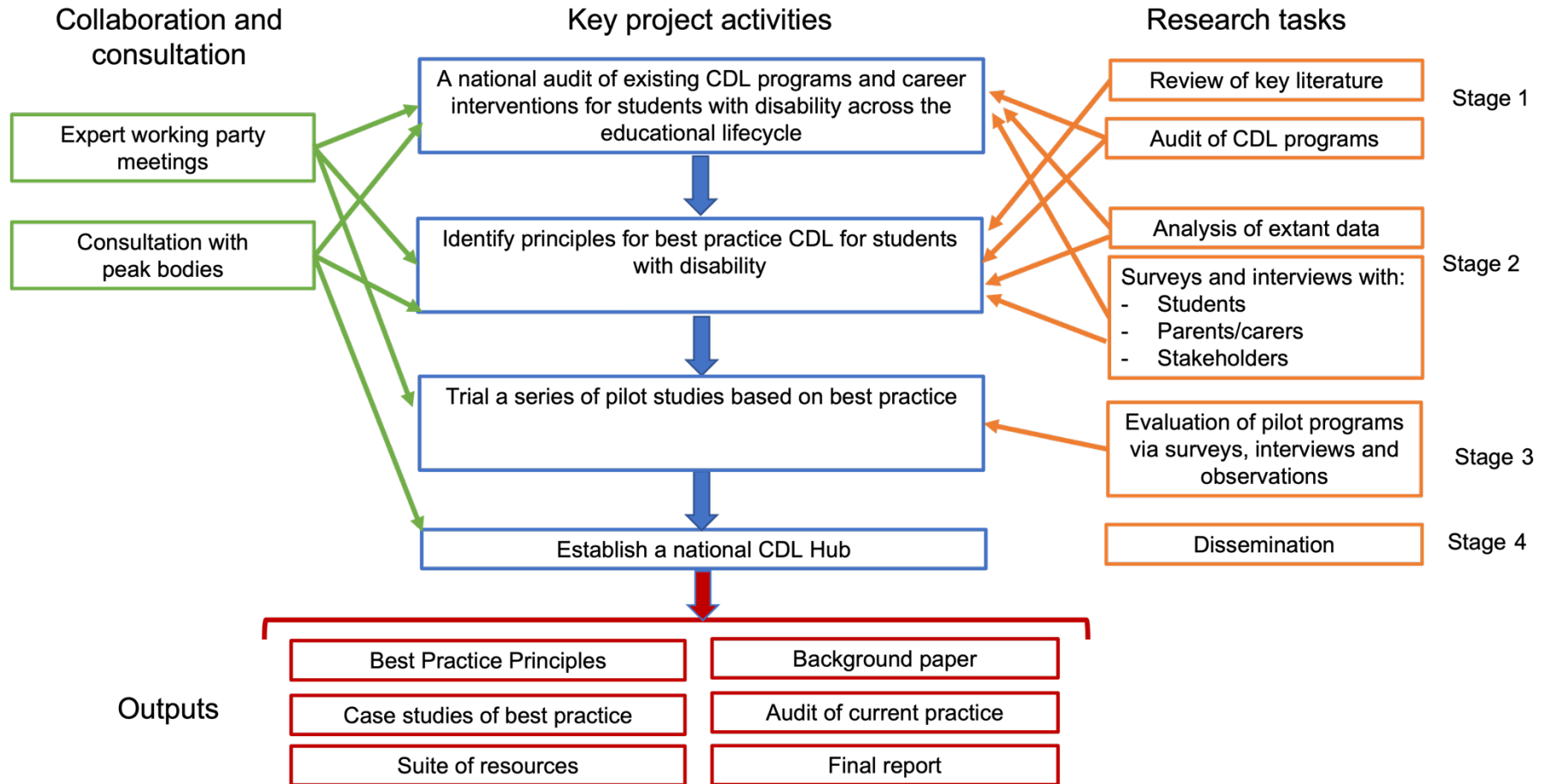|	
Best Practice Principles	Background paper
Case studies of best practice	Audit of current practice
Suite of resources	Final report

Figure 1: Visual overview of the CDL Hub project

Stage 1

Stage 1 consisted of a review of key literature and audit of current provision. These activities were critical in establishing the context and research base for the project. The results of these activities have been written up as a background paper (O'Shea et al., 2023b) and audit of current practice (O'Shea et al., 2023a). Each document details in full the methodology of its creation. An overview of each is provided here.

A **review of key literature** informed the background paper and involved searches of databases and the internet for literature on the topics of careers and career education/development, and disability. Academic articles, book chapters, policy documents, and reports from the past 10 years were included. The review explored the regulatory and policy environment of education and disability, the challenges for students with disability in navigating education and careers, and good practices in supporting the career development learning of students with disability. Literature regarding good practices fed into the audit, which is outlined next.

The **audit** identified current practice in the field of CDL for students with disability and involved collating information on programs gathered through a desktop search, referrals from interviews, and the literature review. This information was compiled into a spreadsheet and used as an up-to-date resource for the project. The focus was largely on career education and development, with programs across the student lifecycle (i.e. primary, secondary and tertiary). Programs that appeared to facilitate knowledge about careers and the world of work for students with disability were also included. The audit document developed from this process provides insights into the current landscape of CDL for students with disability and was an important context for the empirical research that followed in Stage 2.

Stage 2

Stage 2 of the project involved two main activities: mixed method data collection and analysis of extant data sets. This section briefly describes the process of data collection and analysis and provides an overview of the participants involved.

Stage 2 data collection

The data collection in Stage 2 involved surveys and video interviews with three groups of participants: students with disability, parents and carers of students with disability, and key stakeholders across practice, research, advocacy and leadership. Approval to undertake the research was received from the appropriate university Human Research Ethics Committees (HREC) (see Appendix 1 for notice of approval). Recruitment of participants commenced in May 2021 via electronic media including contact list emails, advertisements in eNewsletters, Twitter, and student eNoticeboards. Table 2 summarises the participants and the recruitment approach used to target them.

Table 2: Details of recruitment

Participant type	Methods of recruitment
Students	Emails to educators request that information be passed on to students via educational channels; Twitter tweets; and ADCET student communication channels
Parents	Advertisement in institutional newsletters to parents and on social media platforms
Stakeholders	Advertisements through peak bodies Higher Education Research & Development Society of Australasia (HERDSA), National Centre for Student Equity in Higher Education (NCSEHE), Equity Practitioners in Higher Education Australasia (EPHEA), AustEd, Students, Transitions, Achievement, Retention, Success (STARS), National Association of Graduate Careers Advisory Services (NAGCAS), Australian Tertiary Education Network on Disability (ATEND), Career Advisers Association (CAA), Country Universities Centres (CUC), Regional Development

Participant type	Methods of recruitment
	Australia (RDA), Association for Tertiary Education Management (ATEM), Australian Association of Graduate Employers AAGE) and presentation to National Disability Coordination Officers (NDCOs)

Participants responded to the recruitment communications and participated either by completing a survey or engaging in a video interview[3]. The expert committee engaged in workshops to discuss key issues related to the research questions. Data were collected from **156 participants** during this stage between May and August 2021. Table 3 outlines the participant group and their mode of engagement.

Table 3: Stage 2 participants by mode of engagement

Participant type	Survey	Videoconference interview	Workshop	Totals
Students	60	12	1	73
Parents	5	20	n/a	25
Stakeholders	22	25	11	58
				156

Stage 2 participants

This section provides key information about the participants involved in Stage 2 data collection.

The participants can be grouped into three categories: 1) tertiary students with disability, 2) parents and carers of students with disability and 3) key stakeholders across practice, research, advocacy and leadership. These categories are not mutually exclusive, however. Parents who were students themselves or working in careers or disability participated in the research, as did stakeholders, some of whom also had lived experience of disability and/or were parents of a child living with disability. The latter groups contributed from an immense depth of knowledge.

Students

A total of 73 students with disability participated in the research. Of those who disclosed their disability/disabilities, 16 identified as being neurodivergent (35%), others disclosed chronic illness (n=14, 30%), mental health conditions (n=12, 26%) and physical disabilities (n=8, 17%).

Student participants were predominately female (n=52, 71%) and just over half of the total were mature aged (25 years and older, n=41, 56%). All were currently enrolled in (or on temporary leave from) university, either in enabling (n=3), undergraduate (n=50), postgraduate (n= 19) or certificate courses (n=1). During interviews, 50% of the students indicated that they had previously participated in the VET sector and so were able to provide insights into their experiences in this field.

Most of the student participants were studying full-time (n=40) with 33 indicating they were undertaking part-time studies. Prior to COVID-19, more were studying on-campus (n=39) than online (n=7) or in a combination of on-campus/online modes (n=15). These participants

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[3] For further detail on the video interviews see Groves (2022).

studied a variety of courses, but significantly more were in health (n=26) and social sciences (n=20) compared to other fields.

Parents/carers

Those in the category of parent/carer participants numbered 25. Two were carers of students with disability and one was a father of a student, but most respondents were mothers of students with disability (n= 22). Nine parents had disability themselves, and all were tertiary educated, with most (n=16) holding postgraduate qualifications. In contrast to the student participants, parent/carer participants were generally not from equity backgrounds.

The parent/carer participants involved in this research were able to speak to their experiences across the student educational lifecycle. A total of five were parent/carer to a primary aged student, a further nine cared for a secondary student, with university (n=4) and VET (n=6) also featured. The students that parents/carers spoke about often had multiple conditions, with 14 of them listing autism or neurodivergence as the first condition. Other first-listed disabilities of students included mental health conditions (n=3), learning difficulties (n=1) and Down syndrome (n=2).

What was striking about the students (and to a lesser extent, parents) involved in this study was the pronounced intersectionality of these cohorts. As well as identifying as living with disability, the majority of students also indicated at least one other equity factor (summarised in Table 4), and parents/carers to a lesser extent. As mentioned previously, we know that cumulative disadvantaging factors have profound impacts on both educational and vocational outcomes (Tomaszewski et al., 2020). However, the interviews and surveys conducted through this project revealed the complexities of not only the people involved but also the diversity of issues impacting on career development. This complexity will be further explored in future planned publications arising from this project.

Table 4: Stage 2 student and parent/carer participant demographics: equity categories

Participant type	Low socioeconomic status	Regional	Rural or remote	English as an additional language or dialect	Aboriginal or Torres Strait Islander	Disability
Students (n=73)	23	20	5	11	3	72
Parent/carer (n=25)	0	4	0	2	0	4

Stakeholders

Stakeholder participants in the study numbered 47. Stakeholder participants worked in a range of roles, which could be categorised as practice (n= 27), research (n=6) and policy/advocacy/leadership (n=15). These roles spanned sectors: government (n=9), community organisations (n = 13), VET (n=3), university (n=19) and schools (n=3).

Stage 2 extant data

The project also incorporated data obtained prior to this project by members of the research team. HREC approval was obtained so that this data could be added to the data set and analysed alongside the newly obtained data. Extant data included in the project are as follows:

- 621 survey responses from university students with disability[4]
- 169 email interview responses from university students with disability[5]
- 6 interviews with university students from low socioeconomic backgrounds living with disability[6]

Additionally, the project drew on the findings of four other projects related to careers and employability. The data included:

- three participatory design workshops conducted in four regional, rural and remote (RRR) and low socioeconomic status (SES) schools with students, school staff and carers, and 10 interviews with principals from RRR and low SES schools[7]
- over 29,000 tertiary student responses to the EmployABILITY self-assessment instrument (Bennett & Ananthram, 2022)[8]
- approximately 100 survey responses from secondary school students and career practitioners from secondary schools in low SES areas[9]

Stage 2 analysis

This section briefly explains how each data set was handled in the analysis phase of Stage 2 of the project. All of the data sources of the project were analysed collectively as follows:

- **Survey data** was exported out of the survey program (Qualtrics) and into an Nvivo 12 project set up for this research.

- **Interviews** were transcribed and sent to participants for member checking. Once approved, the transcripts were de-identified, with names of people, locations and institutions replaced with pseudonyms. These were imported into the NVivo 12 project.

- **The extant data** was provided to the project team in the form of de-identified interview transcripts (Word files) or survey responses (Excel files) and all were uploaded to the NVivo 12 project.

All the raw data was coded inductively line by line, and this coding process included constant reflective memoing that included reflections on what was interesting and why. The draft coding structure was then reviewed by two of the research team to check for replication/redundancy. Eleven parent nodes (themes) were sent to the full research team, and each team member was allocated a set of nodes to review and critically analyse. Team members who had examined the same nodes then paired to explore how individual perspectives converged or diverged. Each pair prepared a summary of the main themes, which were then collated and discussed at a full research team meeting. The meeting was a generative discussion with all team members participating and providing feedback. Following this discussion, the ideas were collated as **seven key themes** from the project.

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[4] Eckstein, D. (2022). "Meaningful jobs for students with disability: From luck to business as usual". Data collected May–June 2020. Final report available here.
[5] Pitman, T. (2022). "Supporting persons with disabilities to succeed in higher education". Data collected April–July 2020. Final report available here.
[6] Austin et. al. (2022). *Best-practice career education for students from low socioeconomic status backgrounds*. Data collected February–March 2020. Final report available here.
[7] Dollinger et. al. (2022). *A student-centred approach: Understanding higher education pathways through co-design*. Final report available here.
[8] Bennett, D. (2020). *Embedding employABILITY thinking across higher education*. Final report available here.
[9] Bennett et. al. (2022). *Ameliorating disadvantage: Creating accessible, effective and equitable careers and study information for low SES students*. Final report available here.

These themes formed the basis for the ways in which Stage 3 and Stage 4 activities were conceptualised and carried out. Specifically, the data informed the creation of a set of Best Practice Principles for Career Development for Students with disability (O'Shea et al., 2022a, or see Appendix 2 for summary), the four CDL pilot programs designed and delivered by the partnering institutions (see Stage 3 below), and the design of the CDL Hub (see Stage 4 below). The predominant themes from Stage 2 are presented in the *Findings* section, and additional publications are planned to delve deeper into those findings and provide further insight.

The **Best Practice Principles for Career Development for Students with Disability** are a set of principles for the design and implementation of CDL programs that might best support students with disability. The eight principles articulate practices that support consistent, universal access to quality CDL, and promote the empowerment and agency of students with disability, enhancing student educational and career outcomes. The Principles underpin the work in Stage 3 of the project

Stage 3

Stage 3 of the project involved the piloting of best practice CDL programs for students with disability.

The overarching approach taken by these programs was informed by the Best Practice Principles, and each program was reviewed by the Expert Reference Group. The programs were grounded equally in current research in the field and informed by the data collected in Stage 1.

In developing and executing the CDL programs, a lead researcher from each of the four partnering universities (Deakin University, University of Tasmania, University of Wollongong and Curtin University) established a working group of students, experts and partners to scope, plan and implement the program. This ensured that the individual programs were suited to their context as well as being reflective of the Best Practice Principles.

Each pilot program received HREC approval to collect data about its effectiveness. A description and evaluation of each program was written up as a case study of best practice. The programs were implemented at the four sites between March and August 2022. Details of the structure and also the benefits of the programs are summarised in *Case studies of best practice* or here for a full report of each case. The following table provides an overview of each of the pilot programs, including the participants and research methods used.

Table 5: Stage 3 pilot programs and research methods

Pilot #	Pilot name	Participants	Aim/delivery	Research methods	Best Practice Principles
1	Supporting the CDL of neurodivergent university students	Students who self-identify as neurodivergent: Workshop attendees (n=17) Focus group (n=8) Career practitioner (n=1)	Aim: to provide a range of resources, inclusive of specialised workshops, tools and resources, which will aid student understanding of employment and career opportunities, their unique strengths and skills and access to resources Delivery: 2 x 2.5-hour workshops on CDL for neurodivergence were co-designed by students and career practitioners and delivered during June 2022	Pre-workshop survey Post-workshop focus group Practitioner reflection	BPP 1 to 8
2	Students with disability in work integrated learning	Students who self-identify as living with disability: Surveys (n=134) Focus groups (n=27)	Aim: to understand how WIL placement could be more inclusive to students with disability and to provide recommendations and resources that could benefit the Australian higher education sector	Online survey Online focus groups x 6 (60 mins duration)	BPP 2, 3, 6, 7 and 8
3	Providing effective CDL for students with disability: open learning modules	Practitioners: Pre-survey (n=17), Post-survey (n=9), Interviews/focus groups (n=6) Students: Pre-survey (n=22), Post-survey (n=7), Interviews/focus groups (n=2)	Aim: to to develop a suite of resources for staff to increase their capacity in providing career advice to students with disability; and to understand how effective these resources were in supporting career conversations or the development of CDL programs for students with disability	Pre-intervention survey Intervention: engagement in workshops and online learning modules Post-intervention survey, interviews, focus groups	BPP 1, 2, 3, 7 and 8
4	VET career pathways for school students with disability: informing employers	Local, state departmental staff, employers Interviews (n=9)	Aim: to identify barriers and enhancers to employer and student participation in work-based learning in workplaces; to increase the willingness of employers to engage in work-based learning for school VET students with disability	Working group reflections and survey feedback Participant interviews (Zoom)	BPP 2, 3, 6, 7 and 8

Abbreviations: BPP = Best Practice Principles, CDL = career development learning, VET = vocational education and training, WIL = work integrated learning.

Stage 4

The final stage of the project involved dissemination of the findings and outputs of the research via the **CDL Hub** and **CDL for Students with Disability symposium**. This section provides an overview of these two activities.

The CDL Hub is a suite of evidence-based resources housed within ADCET that cater for students with disability, and others such as myfuture whose audience which consists of school-based careers practitioners, teachers, senior secondary students, and parents and over 1.1 million registered website users. The resources are available for dissemination to existing organisations, government departments and peak bodies for upload to their websites and communication with their specific audience (students, families/supporters, career development practitioners, teaching staff, employers and industry). The overwhelming message from parents/carers, students and stakeholders was the need to avoid producing another location or site for resources, with emphasis on consolidating, not segregating, the information. Interviews and surveys conducted during Stage 2 of the project indicated a need to leverage existing information and communication channels and avoid overwhelming students, families/supporters and stakeholders. This approach was then based on an identified need to add value to existing websites and sources of information.

The CDL for Students with Disability symposium was held over 5 days, from 13–17 February 2023 at the University of Wollongong, at the Wollongong Campus and online. The symposium featured five workshops which were presented by the project lead to launch the CDL Hub, and each of the team leads from the partnering institutions (UOW, Deakin, UTAS and Curtin). 331 people attended from across regional NSW and the ACT, as well as nationwide: 150 came to the on-campus workshops and 181 attended online. Overall feedback from the event was exceptionally positive. Attendees loved the content and appreciated UOW for delivering it. Everyone the team members spoke to in the session was appreciative of the project findings and outcomes, and that is was great to have some new content with practical things they can use in the future, and there was a lot of interest in accessing the resources on the CDL Hub.

Underpinning research activity

Consultation and collaboration were designed into the four stages and underpinned the planning, decision-making and outputs of the entire project. Throughout the project, the research team collaborated with and consulted students with disability, practitioners in the field and experts to ensure that the project progression, conclusions and outputs were rigorous, representative and fit for purpose. These consultations took a number of forms as follows:

- The key investigators on the research team (O'Shea, Groves and Austin) met fortnightly to discuss the progress on the research and also to make decisions informed by the data and the feedback.

- The whole research team met every 3 to 4 months – this was a structured meeting designed to provide updates on the progression of the study and also to seek ongoing critical feedback on the developments within the project.

- An expert committee was established consisting of renowned disability advocates, scholars and practitioners in the field. One student living with disability was also successfully recruited to the expert committee. The expert committee met every six months to contribute unique perspectives to the conceptualisation of the research problem, assist in steering and guiding the implementation of the research, triangulate or offer alternative readings of the research findings, and shape the outputs of the project.

- To ensure that the resources and documents were not unintentionally ableist[10] or deficit in nature, everything produced under the auspices of the project underwent rigorous peer review by people who had either lived experience of disability or were advocates in the disability sector. The final documents and resources underwent accessibility checking and remediation through professional services prior to publication.

In addition to the 415 research participants, more than 49 people made direct contributions to this project within the capacity of consultation. Table 6 identifies the key points of external consultation in the project.

Table 6: Consultation activity throughout the project

Date	Activity	Group	Details
May 2021	Workshop	Project expert committee (n=10)	Discussion of key research questions and methodological approach
Oct 2021	Workshop	Project expert committee (n=10)	Review and feedback on Best Practice Principles and pilot programs
Feb 2022	Critical reading	Australian Disability Clearinghouse on Education and Training (ADCET) expert group (n=3)	Review, workshopping and feedback on the Best Practice Principles
May 2022	Conference presentation and workshop	Career Development Association of Australia (CDAA) conference participants (n=15)	Feedback on Best Practice Principles
Jun 2022	Critical review	Project expert committee (n=12)	Feedback on resources, symposium and CDL Hub concept
May 2022	Critical review	Students as partners (n=3) Practitioner partners (n=2)	Review and feedback of Language of Disability resource
Jul 2022	Conference presentation and workshop	Students, Transitions, Achievement, Retention and Success (STARS) conference participations (n=11)	Presentation on the research and then participant feedback on Best Practice Principles
Oct 2022 to Jan 2023	Professional editing, graphic design and accessibility services	Professional editor, graphic designer and accessibility consultant engaged, each with expertise in the disability sector (n=3)	A rigorous process of professional editing, design and accessibility checking was undertaken to review and adjust each of the documents and resources prior to them being publicly available

Summary

This section highlighted the stages of data collection and analysis. As the section demonstrates, the findings at each stage were informed by the previous stage and incorporated into the next, deeply embedding collaboration and consultation throughout. The next section of this report presents the findings from across the entire project.

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[10] Ableism is discrimination or prejudice towards people with disability.

Findings

This section presents the main themes that were identified through analysis of the data collected in Stage 2 of the project. The themes are presented below as five separate sections. However, the issues are interrelated and often overlapping:

- Shortfalls in the self-advocacy approach

- Inequitable access to capitals (i.e. economic, social and cultural knowledges)

- Influences on career, aspirations, pathways and outcomes

- Confusing nature of CDL information and provision

- Varied attitudes and awareness of disability in work and educational settings

Supporting data in the form of quotations are presented within this section. Table 7 explains how participant details (where these have been provided) will be presented[11].

Table 7: Presentation of participant demographic information

Participant	Demographic information format	Example
Student interviewee	Pseudonym, age, disability	Liam, 17, university student, neurodivergent
Student survey respondent	Student, age range, disability, survey ID number	Student, 21–25 years, university student, chronic illness, #32
Parent interviewee	Pseudonym, parent of [child school level], child disability	Naomi, parent of primary school student with Down syndrome
Parent survey respondent	Parent/carer, survey ID number	Parent of mature-age university student with physical disability, #19
Stakeholder interviewee	Pseudonym, generalised role, sector	Nicola, careers, high school
Stakeholder survey respondent	Stakeholder, generalised role, sector, survey ID number	Stakeholder, advocacy, community organisation, #23

The findings begin with the current model of disability support for education access and the implications of that approach on participants in this study, before moving to a range of predominant themes identified in the data.

Shortfalls in the self-advocacy approach

The current approach to disability support for the purpose of education access tends towards that of self-advocacy. While we wish to avoid perpetuating this approach, self-advocacy is so deeply embedded in the higher education system that some of resources developed may inadvertently work alongside this approach, thus reflecting its embeddedness across the sector. Self-advocacy places the onus on students to disclose their disability before they can qualify for accommodations that meet their learning needs. In higher education settings, disclosure involves a number of (often complicated, time-consuming) steps for course participation, internal CDL activities and also for work experience and WIL. Students must begin the process by approaching their accessibility and inclusion units or educators, and workplace learning managers. They must then disclose their disability and proactively

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[11] Note: where these details were not provided/available this will be presented as in this example: "Participant, extant data, #X".

request the adjustments needed to participate equitably in learning. Placing sole responsibility on the individual student to seek out support adds pressure on them (implicitly or explicitly) to evidence the ability to perform to their capabilities:

> It's just the "We don't believe you, prove it, and fight for it" kind of attitude for any kind of accommodations. (Alex, mature-age university student with autism)

> It's not people's responsibility to manage me, but my problem made all these barriers. (Jazmin, mature-age university student with anxiety)

In a similar vein, current support for students with disability places the onus on the individual student to address any weaknesses or gaps in the system, as this student articulates:

> The onus on students to explain to classroom teachers and unit coordinators "what is wrong" and what is needed to make university experience equitable is unreasonable and exposes students to situations where their needs (which have already gone through an extensive university approval process) are questioned. (Extant student data)

This level of individual responsibility requires effort, time and capacity (i.e. capitals) to successfully navigate, placing unnecessary pressure on students, as well as on parents/families who advocate for them. It is likely that in this process they may feel unsupported and alone when confronted with having to navigate convoluted, and often unfamiliar, higher education systems and processes. Malia, whose son has multiple challenges, felt that navigating these complex university systems with a degree of success was "more due to us and our persistence" than anything else. She and another parent provide more insight into the effort that this involved:

> We were huge advocates for him as well and while I think he saw that was exhausting at times, I think he would say, "I was lucky enough to have people that could advocate for me". (Malia, parent of university student with autism, Tourette syndrome and attention-deficit/hyperactivity disorder [ADHD])

> If I hadn't have been on top of it, we wouldn't be where we are today. (Eliana, parent of primary school student with autism, ADHD and anxiety)

Older students also became exhausted by the need to advocate for themselves, which necessarily involved expending valuable time and effort that many could ill afford to relinquish. Many outlined the need to be continually advocating for their own needs or more broadly for the needs of students with disability. These time-consuming, additional efforts are rarely taken into consideration and can be extremely tiring and often very difficult to undertake, as these students describe:

> Incredibly inaccessible campus. Had to advocate for self and other disabled students constantly. Was unpaid and/or unacknowledged for all the work and experience that went into making the campus more accessible. (Participant, extant data, #112)

> There is a lot of ongoing self-advocacy required to get the support in terms of equipment and workarounds, which can be very time consuming and tiring. (Participant, extant data, #206)

Internal conflict may also arise for students (as well as for parents, families) around disclosure. This may be due to uncertainties about whether to and/or how to disclose disability, and of potential ramifications that may follow disclosure:

> All students always talk about the risk, "You know, what if I disclose, and I get discriminated against?" There's still so much of that in the workplace. (Callie, Career advisor, tertiary sector)

> *I was scared of telling the [research] supervisors that I had a stroke in case they wouldn't take me.* (Charlotte, university student, stroke)

Aside from difficulties navigating these processes, an even broader equity issue arises with the assumption that students and their families have the knowledge, skills and "insider" information (i.e. the required capitals) to navigate these complex systems, just so they can achieve positive outcomes (this point is returned to in the following section *Inequitable access to capitals*).

The expectation of the self-advocacy approach has arisen in the juxtaposition between the medical and social models of disability. While the medical model locates "the problem within the person" (Pitman, 2022, p. 11) and deems disability to be a health condition to be treated or cured by medical professionals, the social model situates disability as a social construct resulting from the interaction between people with impairments and the many physical, attitudinal, social and communication barriers within the environment (Pitman, 2022). Pitman argues further that the medical model "does not adequately address the various social structures—including attitudes—that restrict persons with disabilities beyond the functional realities of their personal circumstances" (2022, p. 11).

It is likely that the tertiary education system in Australia is still in transition between the medical and social models, and that the self-advocacy approach is a useful way to describe current practice. However, attention should also be given to the expectations and requirements placed upon students to provide evidence, usually medical, of their disability. The nuance of how this is problematic should be the focus of further research and is out of scope for this report, however it is acknowledged that requirement for evidence is problematic. This report and the approach taken in this study reflects a more socially orientated approach to disability, given the limitations of both the medical model and the self-advocacy approach. We do however, acknowledge that the social model of disability is not without its critics who argue that "it risks implying that impairment is not a problem because of its notion that people are disabled by society, not by their bodies" (Pitman, 2022, p. 12). This argument is countered by another, that the social model seeks to highlight the deficiencies in the medical model and is "a tool with which to provide insights into the disabling tendencies of modern society in order to generate policies and practices to facilitate their eradication" (Pitman, 2022, p. 12).

Universal Design for Learning (UDL) was mentioned by a number of stakeholders and aligns to a more socially oriented model of disability to educational approaches because it designs for access and inclusion from the outset. When implemented well UDL is likely to reduce the need for additional support. However, some students, especially those with complex needs, are likely to require additional support, and such support should be provided in a manner complementary to universal (accessible and inclusive) design. UDL can reduce the need for disclosure and self-advocacy by providing students with the access and flexibility they need as a "minimum" standard, rather than as an exception, as these stakeholders explain:

> *… embedding [UDL] through everything … whether it's you're going through a work placement, that information is really clear, you know, if you have a circumstance where you need an adjustment, this is the process, and it's all in front of the student everywhere they go – doesn't matter if they have a disability or not; it allows them to make informed decisions at any point through the processes and see if people identify that way.* (Jonah, stakeholder, careers government sector)

> *The problem is not located in the individual; the problem is located in the workforce, in public discourses of career transitions which fundamentally don't include anyone's accessibility needs, including [those of] parents and carers, without disabilities … when we have a mature system that has equitable access,*

we won't need special programs [universal design]. (Belle, researcher in CDL, tertiary sector)

Additionally, several student participants felt that the university should take more responsibility for career-related supports for students with disability:

I mean, the point of uni is, I think apart from making money, is for them to get people to be job-ready, and so to me, it seems a little wild that they don't have an entire something dedicated to making people job-ready. I mean, they say that it's supposed to be ingrained throughout the whole course but these things could totally be missed by someone like me. (Joan, tertiary student, ADHD)

Stakeholder participants suggested that students with disability would benefit from knowing how to discern features of good CDL programs and supports, as well as additional help to understand their rights to educational experiences and skills for discussing adjustments and accommodations with employers. For example, one of the parents/career development practitioners argued that students with disability would benefit from guidance in understanding their own needs and how to translate and communicate their unique skills and experiences to employers:

Work could be done in schools to teach students about disability in the context of work and how to articulate that to an employer. (Jonah, stakeholder, careers government sector)

Inequitable access to capitals

As the current system places much of the responsibility for career development onto the student and their family, there is an assumption that they have the capitals, or required skills and knowledge to do so. However, achievement of positive career outcomes requires self-advocacy and the mobilising of capitals, which include access to knowledge through relevant social networks, financial resources and understandings about how employers operate, to name a few. Often, expectations were placed on parents to undertake additional practical and emotional loads, regardless of whether or not they had the knowledge and resources to do so. Usually this was undertaken to ensure that their family member received adequate support while gaining necessary skills and experiences:

I go and beg and borrow from everyone, give some work experience for my son. We paid for the petrol, we paid for everything so that he gets some experience. I've had to do it all, provide all the things that need to be provided for him because at the time, it wasn't out there. (Farrah, parent of mature-age university student with autism and acquired brain injury)

With the onus on the student and family for CDL, access to careers and employment outcomes may be further compromised by limited access to the material resources and social networks that help to fill the gaps in systemic support. This may include "accessing supports such as eligibility criteria" (Fletcher, stakeholder, careers, tertiary sector) but also support for accessing scholarships or financial assistance for those with a non-physical, or "invisible" disability or a "recent" disability as these students experienced:

… virtually all scholarships seem highly tailored to a specific disability and/or research topic. (Extant student data)

I have only recently suffered from my disabilities … I feel that my disabilities don't "fit" the general "product" offered as they are usually targeted … towards people who have had their disability for life or longer than myself. It would be helpful to have access to services that support people in navigating what it is to have a disability as I don't know where to start half the time … It is hard and disappointing to go through this with little to no support, and no idea where to

start. I almost need a manual titled "So you're disabled, now what?" (Extant student data)

Negative experiences have sometimes been the means by which students and/or parents have gained the necessary understandings to navigate the systems, should they choose to do again. This is unfortunate and is reflected upon by this student:

> *My experience with the university I went to was not great, it caused me to drop out, I got the help but I got it too late and it felt as if I was being pushed aside at the start when I actually needed the help, my experience would not stop me from going back through another course but making sure I push and make the help happen instead of just waiting.* (Extant student data)

Other gaps in provision that were identified by parent participants related to lack of timely CDL advice and support, which often resulted in parents being forced, or expected, to take on the responsibility of providing support. This creates an unnecessary additional load on parents of students with disability. Opportunities that are made available to the student living with disability should not be defined by the level of engagement/advocacy their parents can mobilise.

Influences on career aspirations, pathways and outcomes

Educational pathways and career outcomes are shaped by environmental factors for all students, but this is particularly the case for students with disability. Student participants spoke about how disability shaped the transition-to-employment opportunities that they were provided with and the goals that they were encouraged to work towards.

Transition to employment for students with disability differs according to the institutional setting. These sector-wide variations include the services that students are exposed to, which can also depend on the type of school or educational environment previously experienced. For example, "quite often they [certain programs] are focused on students that come out of what we would call 'segregated settings'; special schools, or units with schools" (Anna, stakeholder, community organisation). These existing programs and links often mean that students are channelled into certain remedial environments or low-skilled employment. As Anna explains, "[the] goal for us is to have a more robust careers guidance program within every school that doesn't necessarily channel students with disability into special programs and special place".

Some student participants revealed that their aspirations and career thinking were impacted by disability from a young age. For example, Rhia, whose son has autism, revealed the challenges arising from the well-meaning, but unrealistic messaging of "do what you want, do your passion":

> *His whole schooling experience … a very commonly autistic thing is gaming – he loves gaming, so the messages he's always received is "You can do gaming when you leave school. You could go into computers, you can do this, you can do that". And the fact of the matter is he can't. His ability to engage academically is not there, you know, learning about computers can be quite weighty, quite difficult to do, and he doesn't have that.* (Rhia, parent of school student with autism)

Students' consideration of post-school options equally could be exacerbated by low expectations set by influential people around them. Leia (tertiary student with dyslexia) revealed that, "a lot of the time I was hearing 'You just need to get through high school'". Similarly, Elaine (tertiary student with chronic illness) described how "no one really expected me to get into uni". This lowering of expectations seemed to be quite a common experience and was noted by stakeholders as well:

> *I've heard a lot from young people that they're deterred from doing subjects that they want to do because of the barriers that schools put up.* (Victoria, stakeholder, community organisation)

Similarly, aspiration was sometimes diminished and (re)directed towards near-future goals, such as just getting through school or securing immediate employment with associated institutional energies only focused on reaching that particular goal. Focus on a milestone achievement such as this can draw attention away from planning longer term for future career decisions. Rhonda (stakeholder) pointed to discrepancies that occurred across different student cohort groups, arguing that conversations had with "every other student" included long-term goal setting. As she described, this differential is unacceptable:

> *I think one of the things that culturally needs to change is once a young person leaves school and they go into some sort of employment – and I don't have research to back this up, this is just my experience working in the disability sector – but we put our young person with disability into that job, and that's where they retire. I want my children to be leaving school, going into jobs, talking about progression through their workplace – we need to be having those conversations for people with disability as well. You know, it's not just you go and you're going to do the same thing in 20 years' time – those conversations we're having with every other student, we need to be having those now with students with disabilities.* (Rhonda, stakeholder, government sector)

Aspiration can be significantly influenced by the dominant discourses within the environments in which students with disability are immersed. These discourses can be implicitly or explicitly positive or negative. Negative attitudes, assumptions and expectations can be detrimental to aspiration and career thinking, especially if these permeate through to attitudes or approaches of school, family or even to students themselves through negative self-appraisals. Leia spoke about how her efforts to overcome the challenges of dyslexia narrowed her focus to simply getting through school, "all through primary school, I wasn't thinking about what's in the future because I was simply trying to learn the English language and get through those kind of issues" (Leia, tertiary student, dyslexia).

Some students reflected upon having a perceived lack of confidence, which was complex, and related to self-perceptions, experiences or attitudes towards them or their disability. One mature-aged student explained how this lack of confidence not only impacted future options but also interacted with his medical diagnosis:

> *The thing that worries me is that running a business is stressful and now I've identified that stress is a problem, I'm not confident of whether I should go down that path. I guess life is stressful, so when you have this sort of disorder and you look physically fine, you kind of feel like people think you're making it up.* (Sidney, tertiary student with PTSD)

Self-confidence was also something that was eroded by these lower expectations, even if unintentionally, as noted by some parents and stakeholders. For example, Camilla (stakeholder, government sector) recalled that while some parents accepted their child's diagnosis, this diagnosis also impacted negatively on their own expectations, revealed in comments such as, "Oh, don't worry, they've got ADHD so I'm not expecting a lot" or "Well, of course with dyslexia, it's going to hold them back". Camilla felt that this may have been a mechanism to "prevent the chance of failure" or having to deal with failure, with a "let's not even go there" attitude. While closely linked to the attitudes and lack of knowledge by institutions and workplaces, such insights into this field indicate how more proactive approaches to nurture self-esteem and self-efficacy would benefit students with disability. The benefits of a proactive approach are described by one parent:

He's worked with a psychologist for a number of years and an ADHD mentor coach, and so I think he developed a little bit of confidence in going, "You know what? There's nothing wrong with me; I think differently", and we've always said that. (Malia, parent of university student with autism, Tourette syndrome and ADHD)

Using discourse that normalises disability and support is also a responsibility of both institutions and employers. Implementing more inclusive discourses can also assist in dismantling stereotyping as well as improving attitudes towards making accommodations for disability, as these stakeholders argue:

I feel like a lot of people don't have the language of impairment and adjustments and reasonable accommodations and things like this – that whole vocabulary is missing, and I think that vocabulary would be really useful for employers to have. (Belle, researcher in CDL, tertiary sector)

I think we also need to normalise disability and recognise that just because you have a disability doesn't mean you cannot achieve something, and I think we still have this stereotype, and stereotypes are rife in the world of disability. (Camilla, stakeholder, government sector)

However, according to some participants, the school and tertiary environment did not always successfully support self-determination, which can erode self-confidence. Lack of self-confidence had a significant impact on how students with disability articulated career or education aspirations. Stakeholder participants explained that "students with disability know what they want to do with their careers, but they're used to being told they can't" (Reinhart, stakeholder, careers tertiary sector). This is upheld by Alexander (stakeholder, careers, tertiary sector) who added how, in his experience, students "will typically present as saying, 'No, I'm not sure what I'm going to do' when asked because they want to avoid being told [they can't do] that". This data is also supported by the striking finding in recent research (Eckstein, 2022) that nationally, university students with disability report having clear career goals, but members of staff report being unaware of them.

High expectations are fundamental to supporting self-determination. This was a common refrain from the careers practitioners and parent participants. In part, supporting self-determination relates to deliberate strategies that are designed to identify and articulate the strengths of students. There was a strong sentiment from some of the stakeholders of the importance of focusing on students' strengths and not letting these be obscured by disability. This kind of mindset requires more than a life skills course and needs to be reiterated throughout schooling, home and beyond. One stakeholder, Camilla, suggested an earlier necessary step for educators and families, related to supporting self-determination:

If we're [career practitioners] using [what] we call a "differentiated service delivery model", then we'll be able to cater for anyone's needs.

Camilla, stakeholder, government sector)

Confusing nature of career development learning information and provision

Overwhelmingly, the participants in this study (students, parents *and* career practitioners) indicated the confusing nature of the CDL landscape. There was a level of frustration expressed because of a lack of consistency across state programs, and with each school or institution having different affiliations as well as having to keep up with frequent changes in housing of resources, processes, legislation, etcetera. Career practitioner participants were often insufficiently aware of initiatives in the disability space. However, again, the onus of searching across multiple, unconnected sites seemed to be placed resoundingly on the individual practitioner. Many indicated that, even if initiatives were found, they lacked the

time and resources to investigate them in any depth. While pockets of resources are available, these are often not distributed across the various sectors. For example, some mentioned National Disability Coordinating Officers (NDCO)[12] having great resources but that these are not often available in schools. Multiple stakeholder participants were reticent about their knowledge of the existence of initiatives and resources, with responses such as:

> *I have to be honest and say I know there's a lot of resources out there and I'm on the ADCET[13] newsletter and every second one I go, "Oh yeah, I want to read that" and then don't have time, so a lot of things that I say you might say it's actually already out there.* (Aria, stakeholder, careers, tertiary sector)

> *There are bits and pieces everywhere that I can access if I need around increasing accessibility of learning and teaching, that sort of stuff is already there.* (Jennifer, stakeholder, careers, tertiary sector)

> *Sometimes when I think of websites, there's just so much information, it's hard to know where to focus.* (Callie, stakeholder, careers, tertiary sector)

Navigating programs, pathways and sources of help was a point of concern for both students and their families. Student experiences were often very fractured, in that they were required to go to staff in different roles, or access different support services depending on their need. There was no single point of contact or central source that could cater to the range of support needed, as indicated by the variety of services that students accessed or made reference to:

- *counselling* for their mental health and wellbeing and for support around their disability, as well as seeking advice about their capacity to continue with their studies

- *accessibility services* (other terms were used for this service such as Disability Support; Equitable Learning Services) to develop Individual Learning Plans (ILPs, also referred to as Equity and Diversity Plans) and also to arrange provisions and adjustments in regard to the students learning

- *advocacy groups and legal services* when issues of discrimination arose regarding employment

- a *youth leadership program* that provided authentic experiences in CDL for students

- *informal networks* such as friends, friends living with disability and parents as key supports in their learning journey; students also frequently referenced the role of their parents advocating on their behalf

- relationships built with *classroom teachers, tutors and lecturers*, with key people identified as going above and beyond to provide support.

Student participants made very few references to being engaged in mainstream career education programs or having access to tailored career programs that focused on students

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[12] National Disability Coordination Officer (NDCO) Program is funded by the Department of Education, Skills and Employment. NDCOs work strategically with stakeholders to address the systemic barriers experienced by people with disability engaging in tertiary education and subsequent employment. NDCOs do not provide direct support or case management to individuals (ADCET, 2022).

[13] The Australian Disability Clearinghouse on Education and Training (ADCET) is funded by the Australian Government Department of Education under the Higher Education Disability Support Program and is hosted by the University of Tasmania. ADCET's mission is to contribute to the improvement of the educational experiences and to the successful outcomes for students with disability in post-secondary education (ADCET, 2022).

with disability. Most of their experiences related to individualised supports rather than CDL programs. The quality of career services for students with disability were variable, and CDL providers did not always understand the reality of the job market and the range of employment opportunities that might be available for students with disability.

Varied attitudes and awareness of disability in work and educational settings

Student participants felt that there was a lack of awareness and confidence about disability from both careers staff and employers, which impacted their CDL and transition to employment. Other respondents in this study also felt that employers lacked knowledge and confidence about disability. For example:

> We've got to do a lot more work [in the] training of employers because employers are a bit scared to take on young people, and don't have the knowledge or the confidence and we've got to get them ready to do that and to help them make any modifications to the workplace that's needed and to highlight the benefits of taking them on. (Henry, stakeholder, government sector)

Students with disability reported missing out on work placements because of employers' perception of risk and the extra work that might be required. Based on this feedback, it seems important that employers consider how to implement flexible work arrangements and other strategies that will help people with disability to participate equitably.

However, there was evidence in this study that some employers do understand the needs of students with disability and make the necessary adjustments to the workplace. An understanding where there is also consideration of modifications needed is essential to provide opportunities for the person with disability to thrive:

> One student who was using a motorised wheelchair and I spent months, six months, working on an option for her of where we were going to help her with the work integrated learning. It took six months and lots of begging and we ended up working with one organisation who actually had to modify their entire building and they did, an NGO, for her to complete their studies. (Jennifer, stakeholder, careers, tertiary sector)

The lack of staff awareness of CDL, how it can help and the need for specialist training was a predominant theme. Many of the careers advisors expressed limitations around their level of expertise in engaging in career conversations with students with disability. The stigma associated with living with disability meant that often these conversations were not happening – there was a reluctance to address disability head on, which meant that some parents reported a lack of "hard" or focused career conversations taking place.

The lack of compulsory accredited training for careers advisors in CDL in general, and of training for careers advisors in CDL for students with disability in particular, directly impacte on the level of confidence of these practitioners. In interviews, a number indicated that they did not feel empowered or qualified to have the nuanced and sensitive careers conversations that are important for students with diverse needs. The experience of one stakeholder working in the tertiary sector was not uncommon:

> I have no background at all in the disability sector, so for me, it's the same thing. To me, it's also something where I go, "Oh, that's different. Hang on, how do I talk about that? Is this okay? Is that okay?" Overcoming that fear I think is also a big thing. (Aria, stakeholder, careers, tertiary sector)

The general lack of specific training as well as a lack of structured or embedded support for careers advisors was often reactive in nature rather than proactive. This is exemplified in another stakeholder's description of a "typical" scenario:

There may be sometimes more layers of complexity for students with a disability because [it's] even harder, sometimes – "Let's just get through my studies, let's just get through this unit" … So then, you come in to the last six months and suddenly it's frantic, "Now I have to actually start thinking about the job market, or getting a job", or similarly for some courses with work experience, if it's not embedded in the course, then they're having to think about that at the end and sometimes, it can actually be an impediment to graduating because the box can't get ticked. (Jennifer, stakeholder, careers, tertiary sector)

Disability awareness training for staff has the potential to increase sensitivity, confidence and knowledge about practical strategies using best-practice guidelines and ways of creating a safe space to engage in conversations with individual students around what would best support them. Working collaboratively with the student is an essential aspect to understanding their needs and goals and in helping them plan for long-term career aspirations. Providing this type of training may encourage staff to adopt an imputed disability approach where students do not have to disclose, but staff can talk to students about what they see as the students' strengths, weaknesses and needs:

Some of the crankier teachers already trigger anxiety attacks for my daughter. I believe the educational journey is primarily shaped by the teacher–student relationship, and this is so dependent on the teachers' own perception and understanding of neurodiversity. (Parent of primary school student with autism, #3)

Case studies of best practice

Stage 3 of the project sought to design, implement and evaluate pilot programs with the aim of further refining and understanding best practice CDL for students with disability. This section provides an overview of the pilot programs and a snapshot summary of each pilot program, including the key learnings from their implementation and evaluation. A full account of each program, or case study, is available here. This section begins with an overview of the pilot programs and the Best Practice Principles that each were guided by.

Overview of the pilot programs

The four pilot programs were:

- Pilot program 1: CDL for neurodivergent tertiary education students
- Pilot program 2: Redesigning work integrated learning placements to support students with disability
- Pilot program 3: Building the capacity of career and accessibility practitioners to provide tailored career advice to students with disability
- Pilot program 4: VET career pathways for school students with disability: working with employers

The following matrix shows the Best Practice Principles that guided each pilot program.

Best Practice Principle for CDL for students with disability	Curtin	Deakin	UOW	UTAS
Career Development Learning (CDL) led or developed by professional career development practitioners supports activity that is based on high standards of practice and ethical behaviour and also leverages existing knowledge and resources.	X		X	
CDL co-designed with people with disability promotes the empowerment and agency of this group.	X	X	X	X
CDL which foregrounds individuals' strengths/capabilities and is embedded in personal perspectives of success respects and develops the whole student.	X	X	X	X
Universal Design for Learning (UDL) implemented across all CDL activities ensures universal access and support.	X			
A longitudinal lifecycle approach to CDL that is correlated with maturity and key decision-making points supports consistent career thinking, planning and decision-making.	X			
CDL provided within disability-inclusive, anti-discriminatory partnerships between industry, students, families/supporters, educational institutions and government agencies enhances student outcomes.	X	X		X
Employers, teaching staff and career practitioners who are disability confident, aware of unconscious bias and with positive attitudes towards diversity and inclusion create respectful and equitable educational and employment contexts for students with disability.	X	X	X	X
Anti-discriminatory, inclusive and accessible career information incorporated in all general career development materials supports awareness of CDL opportunities, resources and networks. It also promotes engagement with the networks for students with disability and their supporters.	X	X	X	X

Pilot program 1: Career development learning for neurodivergent tertiary education students

The CDL program for neurodivergent tertiary students added value to the range of existing services available at the host university. The focus was to provide a broader cohort of university students, from first year of study to postgraduate, with the necessary skills and information on establishing meaningful careers and understanding their career and employment options. The primary focal point for delivery of this pilot program was through face-to-face workshops in which students engaged as both receivers and sharers of information and resources through the lens of neurodiversity. The workshops also assisted in facilitating a community of practice across the broad neurodivergent university student cohort.

The development of additional resources was facilitated by feedback from workshop participants through survey responses and focus group sessions. The resources focused on the delivery of concise and easily accessible information sheets to facilitate CDL. The pilot program was evaluated and contributed to recommendations for further improvements and expansion across the tertiary education sector.

Pilot program 2: Redesigning work integrated learning placements to support students with disability

This case study explored the perceptions and experiences of students living with disabilities regarding work integrated learning (WIL) placement during their university study. In the study, students living with disabilities included those with intellectual, learning, physical or sensory disabilities, as well as those who have a mental health, neurological and/or chronic medical condition(s). The study took place at one university in Victoria, Australia, in 2022. At the time of the study, the university had an estimated 12% of the student intake identifying as having one or more disability, compared to a national estimate of 17% (ABS, 2019). The study design was influenced by Principle 2 of the Best Practice Principles for CDL for students living with disability: CDL co-designed with people with disability promotes the empowerment and agency of this group. The project invited currently enrolled students with disability to share their perspectives on the benefits of, and the barriers to, participation in WIL placement, their ideas on ways to make WIL placement more inclusive, and their suggestions for resources that could better support students in the future. In our study, we sought only to explore for-credit WIL placement experiences, where the placement was undertaken as part of the student's course, credit was received, and placement was supported by the university.

Findings suggest that students value WIL placement for career preparation but that it raises several challenges around access, disclosure and corresponding anxiety around meeting expectations. Suggestions for improvement including a learning support coach or mentor, open dialogue around disclosure, and possible accommodations and flexibility around assessment.

Pilot program 3: Building the capacity of career and accessibility practitioners to provide tailored career advice to students with disability

This case study explored the existing capabilities and experiences of career and accessibility practitioners in providing effective CDL to students with disability. Currently enrolled students with disability were invited to join the project team to share their lived experiences with CDL. Following this, the project team collaborated with these same students to design professional learning modules for career and accessibility practitioners. The project sought to understand how these professional learning modules may have impacted the confidence and capabilities of career and accessibility practitioners to provide effective career advice to students with disability.

The findings identified a gap between formal career practitioner training and information about disability, with very few resources that apply knowledge about disability in a career context. This was identified to be important knowledge and skills for career practitioners, as students often reported lacking confidence and not feeling valued to be considered for employment. The career and accessibility practitioners who took part in this study identified particular benefits of undertaking professional learning modules to better understand how they can support students with disability to engage in career education services, including increased confidence in acknowledging and disclosing disability, access to resources and changing their language and questioning techniques. While the modules that were developed as part of this study were broad in nature, modules that specifically supported neurodivergent students, as well as modules that addressed cumulative disadvantage, were key recommendations.

Pilot program 4: VET career pathways for school students living with disability: working with employers

This project focused on increasing employer and industry understanding of what is involved in engaging in the work-based component of school-based VET for students with disability. The project also identified barriers and enhancers to both employer and student participation in work-based learning in workplaces in a regional city (Launceston, Tasmania), as well as strategies to address these. The Launceston Chamber of Commerce was invited to partner with the University of Tasmania (UTAS) and the Tasmanian Department of Education in a pilot project aiming to increase the willingness of employers to engage in work-based learning for school VET students with disability. This was achieved by developing practical guidelines that answer common employer questions and provide easy access to a range of resources to support employers and students. The project targets a wide variety of sectors across the economy, and an intended outcome is to increase the capability and skill base of the region's workforce.

Discussion

The discussion considers what hinders good practice for CDL for students with disability, in light of the findings. This includes self-advocacy approaches, inequitable access to capitals, negative career-related influences, confusion around information and provision of CDL and varied attitudes and awareness of disability in work and educational settings. The discussion is followed by recommendations on how practice for current CDL delivery can be improved.

The findings provide a clear critique of **self-advocacy approaches** taken by the current model of disability support for the purpose of education access. Self-advocacy is neither equitable nor effective in enabling students with disability to gain the same experiences and opportunities leading to employment or careers as their peers without disability. The most significant flaw in self-advocacy approaches is the assumption that the responsibility lies solely with the individual (and those who advocate for them), which puts all parties at immediate disadvantage even though the right to participate equitably in work is legislated. This places undue and unfair pressure on students with disability and their families in terms of the time, effort and emotional exertion needed to advocate for the support they are entitled to access, with some having to "prove" their disability. This cycle is often repeated in each new situation, and the exertion and repercussions can become cumulative. This also raises the issue of disclosure, which many participants struggled with, as discrimination in the workplace, or fear of it, was very real. This highlights that it cannot be assumed all students and all employers have developed the skills needed to facilitate open discussion regarding adjustments and support in the work environment. It is clear that all parties need support if they are to participate in professional discussions about how people do their learning or how they do work for an organisation. This, however, only addresses some of the shortcomings of self-advocacy approaches.

Approaches other than self-advocacy must therefore be used to ensure that career-related opportunities provide a rich learning experience that enhance the skills, knowledge, capacity and interest of students with disability. By designing inclusion from the outset, Universal Design for Learning (UDL) shifts the burden of advocacy from the individual and through an equity lens directs the responsibility for embedding equity across all activities and structures to the workplace or organisation.

Following on from self-advocacy approaches is the reality that many students with disability and their support networks experience **inequitable access to the capitals** needed for navigating and advocating for themselves. This is the impact of widely held assumptions that these students and those who support them possess the necessary (insider) knowledge, skills and understandings to negotiate a range of different processes and systems. However, the findings in this study clearly show the difficulties for participants when prior knowledge or understanding have not been part of their lived experience, and, therefore, this knowledge is simply not available for them to draw upon in new or unfamiliar situations. The difficulties for students can be exacerbated when these misguided assumptions are not acknowledged or remain unaddressed by the organisations and institutions involved. The participants in this study often found institutional or workplace processes unfamiliar and complex, and the expectation was that students and parents needed to engage in the difficult work of negotiating a range of diverse systems and processes. This is simply not good enough. Instead, this type of inequitable access could be easily remedied through clearly written and explained informative resources housed in a centralised repository that is known about and accessible for students, parents/carers and those who support them. It could also be argued that the processes themselves need to be considered and framed in terms of UDL rather than designed from an ableist perspective.

Complex processes are rife within organisations and institutions; they reflect sector-wide practices and can have a **negative influence on career aspiration** and on the transition to employment for students with disability. The findings show that segregation within the

schooling system can influence the career aspirations, pathways and outcomes for students with disability, especially if expectations are lowered or unrealistic. The findings also show that when students are exposed to negative attitudes and discourse connected to their disability, this diminishes their aspirations, especially in regard to long-term career goals. As one stakeholder identified, there is a culture that needs to be challenged and changed so that students with disability are provided with 1) discussions on long-term goals, 2) potential career options and 3) necessary steps to achieve their goals that will help set the foundation for a satisfying work life into the future. Discourse that normalises disability is a suggested starting point, as is focusing on the strengths and skills that students with disability possess and can build upon.

Part of the bigger issue identified by all participant groups was the lack of access to centralised CDL information and provision, and confusion around how and where to access these resources. While many resources do exist, participants lamented that they are located across multiple sites and sometimes restricted to particular sectors, with the onus (again) on individuals to navigate and locate. At the local level, participants found that the roles of staff for different aspects of support made the act of accessing quality CDL extremely difficult and time consuming, raising the issue of lack of compulsory accredited training. In addition, support that students needed also varied widely, including counselling, accessibility services, advocacy groups and legal services, leadership programs, opportunities to build relational social networks with like-minded others and teaching/academic staff.

Finally, the **lack of awareness of disability in general as well as attitudes** within work and education settings impacted on transitions to work. This stemmed from employer misinformation or lack of understanding of how workplaces can cater for a person with disability; other employees shared this lack of knowledge. Careers advisors, who play a significant role in the transitioning stage, were largely unaware of *how* to provide CDL, especially in relation to students with disability. This was partly due to a lack of accredited training aimed at building the insight, skills and confidence of careers advisors to engage with individual students' aspirations and needs and to support students with disability to discuss and work towards their long-term career options.

A limitation of this study was a lack of representation within some key participant groups of employers and VET student participation. Future research that specifically explores the VET sector will add to understandings of how people with disability can be successfully supported in CDL across sectors and career paths.

Overall, the findings resonate strongly with the CICA Professional Standards, which "emphasise competencies that reflect the career development literature's focus on client experience and enabling client agency" (CICA, 2019, p. 24). Relevant competencies include:

- conducting specialised vocational counselling for people with disabilities
- providing career guidance, job-seeking skills training, and job placement for people with disabilities
- understanding applied counselling approaches and their application to people with disabilities
- understanding psychosocial issues related to the experience of disability
- facilitating accommodations needed for job placement.

Recommendations for best practice for career development learning

Based on the findings and discussion, there are eight recommendations for enhancing practice.

- Career development learning (CDL) should be led or developed by professional career development practitioners who support activity based on high standards of practice and ethical behaviour and who could be supported by knowledge and resources that are open access and housed within a hub.

- CDL programs and resources should be co-designed with people with disability to promote empowerment and agency, and to ensure quality, well designed outputs that broadly adopt the expertise and experience of people with disability; CDL activities should be self-directed and person-centred to identify and leverage the strengths and assets that the individual already has.

- CDL should foreground the development of each individual's strengths and capabilities; it should be embedded in personal perspectives of success that respect and develop the whole person.

- All CDL activities should be underpinned by the principles of Universal Design to be inclusive of and accessible to the broadest diversity of students possible. Well designed CDL activities that broadly consider removing barriers to access for students with disability will support easier access and engagement, and should be offset by the availability of high quality and skilled supports as required by appropriately skilled and knowledgeable professional practitioners, and be provided by appropriately skilled and knowledgeable professional practitioners.

- Career thinking, planning and decision-making initiatives should utilise a longitudinal lifecycle approach to CDL and should correlate with maturity and key decision-making points.

- To enhance student outcomes, CDL should be provided within disability-inclusive, anti-discriminatory partnerships between industry, students, families/supporters, educational institutions and government agencies.

- Respectful and equitable educational and employment contexts for students with disability should be created by employers, teaching staff and career practitioners who are disability confident, aware of unconscious bias issues and possess positive attitudes towards diversity and inclusion. Promoting CDL to employers can be through support to provide work placement/work integrated learning opportunities for students with disability.

- Anti-discriminatory, inclusive and accessible career information should be incorporated into all general career development materials to support awareness of CDL opportunities, resources and networks. It also promotes engagement with the networks for students with disability and their supporters.

Existing national career projects

The references in this section cite existing NCSEHE-funded national career research projects that this project built upon.

Austin, K., O'Shea, S., Groves, O., & Lamanna, J. (2022). *Best-practice career education for students from low socioeconomic status backgrounds: Final report.* Perth: National Centre for Student Equity in Higher Education, Curtin University. https://www.ncsehe.edu.au/publications/best-practice-career-education-low-socioeconomic-students/

Bennett, D. (2020). *Embedding employABILITY thinking across higher education.* Canberra: Australian Government Department of Education and Training. https://ltr.edu.au/resources/FS16-0274_Bennett_Report_2020.pdf

Bennett, D., Coffey, J., Bawa, S., Carney, D., Dockery, A. M., Franklyn, K., Koshy, P. … (2023). *Ameliorating disadvantage: Creating accessible, efficacious and equitable careers and study information for low SES students.* Perth: National Centre for Student Equity in Higher Education. https://www.ncsehe.edu.au/careers-study-information-low-ses-students/

Dollinger, M., Harvey, A., Naylor, R., Mahat, M. & D'Angelo, B. (2022). *A student-centred approach: Understanding higher education pathways through co-design*. *Final report*. Perth: National Centre for Student Equity in Higher Education, Curtin University. https://www.ncsehe.edu.au/publications/higher-education-pathways-co-design/

Eckstein, D. (2022). *Meaningful jobs for students with disability: From luck to business as usual. Final Report.* Perth: National Centre for Student Equity in Higher Education, Curtin University. https://www.ncsehe.edu.au/publications/jobs-students-disability/

Kilpatrick, S., Fischer, S., Kiorala, S., Woodroffe, J., Barnes, N., Groves, O., Katersky Barnes, R. & Austin, K. (2022). *Informing key influencers of low SES regional, rural and remote students' education and career pathway choices: A whole community approach*. *Final report.* Perth: National Centre for Student Equity in Higher Education, Curtin University. https://www.ncsehe.edu.au/publications/key-influencers-low-ses-regional-rural-remote-students/

Pitman, T. (2022). *Supporting persons with disabilities to succeed in higher education. Final report.* Perth: National Centre for Student Equity in Higher Education, Curtin University. https://www.ncsehe.edu.au/publications/persons-disabilities-higher-education/

References

Accenture. (2018). *Getting to equal: The disability inclusion advantage*. https://www.accenture.com/_acnmedia/pdf-89/accenture-disability-inclusion-research-report.pdf

Adams, H. (2018). *Tailoring higher education instruction for students with ASD to transition to employment: Employer perspectives.* [Unpublished doctoral dissertation]. Marshall University. https://mds.marshall.edu/etd/1186/

ADCET (2022). *Australian Disability Clearinghouse on Education and Training: Supporting you supporting students*. Retrieved November 29, 2022, from https://www.adcet.edu.au/about

Andrews, D., & Hooley, T. (2017). "… and now it's over to you": Recognising and supporting the role of careers leaders in schools in England [Article]. *British Journal of Guidance and Counselling, 45*(2), 153-164. https://doi.org/10.1080/03069885.2016.1254726

Aspden, T., Cooper, R., Liu, Y., Marowa, M., Rubio, C., Waterhouse, E.-J., & Sheridan, J. (2015). What secondary school career advisors in New Zealand know about pharmacy and how that knowledge affects student career choices. *American Journal of Pharmaceutical Education, 79*(1), 7-14. https://www.ajpe.org/content/79/1/07

Atalier Learning Solutions. (2012). *Report of the review of the Australian blueprint for career development*. https://cica.org.au/wp-content/uploads/ABCD-Review-Report-Nov-2012.pdf

Atkinson, G. (2021, June 2). *What is work integrated learning?* https://myfuture.edu.au/career-articles/details/what-is-work-integrated-learning

Australian Bureau of Statistics. (2019). *Disability, ageing and carers, Australia: Summary of findings*. https://www.abs.gov.au/statistics/health/disability/disability-ageing-and-carers-australia-summary-findings/latest-release

Australian Bureau of Statistics. (2020). *Disability and the labour force.* https://www.abs.gov.au/articles/disability-and-labour-force

Australian Bureau of Statistics. (2022). *People with disability in Australia.* https://www.aihw.gov.au/reports/disability/people-with-disability-in-australia/contents/employment

Australian Government. (2013). *National career development strategy*. https://www.education.gov.au/school-work-transitions/resources/national-career-development-strategy

Australian Government. (2019). *Future ready: A student focused national career education strategy*. https://www.education.gov.au/data-and-research-schooling/resources/future-ready-student-focused-national-career-education-strategy

Australian Government. (2021). *Final report of the 2020 review of the Disability Standards for Education 2005*. https://www.dese.gov.au/disability-standards-education-2005/resources/final-report-2020-review-disability-standards-education-2005

Australian Human Rights Commission. (2016). *Willing to work: National inquiry into employment discrimination against older Australians and Australians with disability*. https://apo.org.au/sites/default/files/resource-files/2016-05/apo-nid66558.pdf

Barrow, S. (2013). *The transition of secondary students with learning disabilities and post secondary life opportunities*. [Unpublished doctoral dissertation]. Illinois State University.

Bennett, D., & Ananthram, S. (2022). Development, validation and deployment of the EmployABILITY scale. *Studies in Higher Education*, *47*(7), 1311-1325*.* https://doi.org/10.1080/03075079.2021.1888079

Brown, D. (2020, May). *People with disability*. *COVID-19 Insights: Towards just futures*. Brotherhood of St Laurence, Research & Policy Centre. https://www.bsl.org.au/research/covid-19-insights/

Brown, S. (2015). *Exploring the district-wide school counselor leader's role in creating a college readiness culture* [Unpublished doctoral dissertation]. Fordham University. https://research.library.fordham.edu/dissertations/AAI3683425

CDAA. (2012). *Report on the 6th international symposium on career development and public policy*. https://www.education.gov.au/school-work-transitions/resources/report-6th-international-symposium-career-development-and-public-policy

CICA. (2014). *School career development service benchmarking resource*. https://cica.org.au/wp-content/uploads/CICA-School-Career-Benchmarking-Resource1.pdf

CICA. (2019). *Professional standards for Australian career development practitioners*. https://cica.org.au/wp-content/uploads/Professional-Standards-for-Australian-Career-Development-Practitioners-2019.pdf

CICA. (2022). Professional Standards for Australian Career Development Practitioners. Careers Industry Council of Australia. https://cica.org.au/wp-content/uploads/CICA-Professional-Standards-2.1-Final-2022-2.pdf

Corcoran, T., Whitburn, B., & Knight, E. (2022) Inherent requirements in higher education: locating You in Us, Perspectives: *Policy and Practice in Higher Education*, 26(2), 69-75. https://doi.org/10.1080/13603108.2021.1986166

Creswell, J. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Sage Publications.

Cunnah, W. (2015). Disabled students: identity, inclusion and work-based placements. *Disability & Society, 30*(2), 213-226. https://doi.org/10.1080/09687599.2014.996282

Cunningham, M., Orsmond, D., & Price, F. (2014, March quarter). *Employment outcomes of the economically disadvantaged.* Bulletin*.* https://www.rba.gov.au/publications/bulletin/2014/mar/pdf/bu-0314-3.pdf

Eckstein, D. (2020). *"Nothing inevitable about exclusion": Careers support for students with disability.* NCSEHE Snapshots. https://www.ncsehe.edu.au/wp-content/uploads/2020/11/DavidEckstein_Spread.pdf

Eckstein, D. (2022). *Meaningful jobs for students with disability: From luck to business as usual. Final report*. National Centre for Student Equity in Higher Education. https://www.ncsehe.edu.au/wp-content/uploads/2022/02/Eckstein-Swin-EquityFellowship-FINAL_23-2-2022.pdf

Education Council. (2020). *Looking to the future. Report of the review of senior secondary pathways into work, further education and training*. https://uploadstorage.blob.core.windows.net/public-assets/education-au/pathways/Final%20report%20-%2018%20June.pdf

Engstrom, C., & Tinto, V. (2008). Access without support is not opportunity. *Change*, January/February 2008, 46-50.

Groves, O. (2022). "I don't feel anxious [talking] to you": Inclusive methodologies for researching the educational and vocational experiences of university students with disability.

In O'Shea, S., Groves, O., Austin, K., & Lamanna, J. (Eds) *Considering career development sustainability: Implications for research and practice*. Springer, UK. https://link.springer.com/chapter/10.1007/978-981-19-6637-8_5

Irving, B. A. (2013). Access, opportunity, and career: Supporting the aspirations of dis/abled students with high-end needs in New Zealand. *International Journal of Inclusive Education, 17*(10), 1040-1052. https://doi.org/10.1080/13603116.2012.728634

Kalargyrou, V., & Volis, A. A. (2014). Disability inclusion initiatives in the hospitality industry: An exploratory study of industry leaders. *Journal of Human Resources in Hospitality & Tourism, 13*(4), 430-454. https://doi.org/10.1080/15332845.2014.903152

Kantar Public. (2017). *Building employer demand: Research report*. Australian Government Department of Social Services. https://www.dss.gov.au/sites/default/files/documents/07_2018/building_employer_demand_research_report.pdf

Lamb, S., Jackson, J., Walstab, A., & Huo, S. (2015). *Educational opportunity in Australia 2015: Who succeeds and who misses out*. Mitchell Institute. https://www.vu.edu.au/mitchell-institute/educational-opportunity/educational-opportunity-in-australia-2015-who-succeeds-who-misses-out

Lee, M. N., Abdullah, Y., & Mey, S. C. (2011). Employment of people with disabilities in Malaysia: Drivers and Inhibitors. *International Journal of Special Education, 26*(1), 112-124.

Lindsay, S., Cagliostro, E., Albarico, M., Mortaji, N., & Karon, L. (2018). A systematic review of the benefits of hiring people with disabilities. *Journal of Occupational Rehabilitation*, 28(4):634–55. https://doi.org/10.1007/s10926-018-9756-z

Lindsay, S., Hartman, L., & Fellin, M. (2016). A systematic review of mentorship programs to facilitate transition to post-secondary education and employment for youth and young adults with disabilities. *Disability and Rehabilitation, 38*(14), 1329-1349. https://doi.org/10.3109/09638288.2015.1092174

Mann, A., Denis, V., Schleicher, A., Ekhtiari, H., Forsyth, T., Liu, E., & Chambers, N. (2020). *Dream Jobs? Teenagers' career aspirations and the future of work*. https://www.oecd.org/education/dream-jobs-teenagers-career-aspirations-and-the-future-of-work.htm

MCEECDYA. (2010). *Australian blueprint for career development*. https://cica.org.au/wp-content/uploads/Australian-Blueprint-for-Career-Development.pdf

McGrath, D., & Murphy, D. (2016). Understanding accounting as a career: An immersion work experience for students making career decisions. *Accounting Education, 25*(1), 57-87. https://doi.org/10.1080/09639284.2015.1125299

McLoughlin, M. (2018). Employability training for sixth form learners with special educational needs: Preparing for success? *Support for Learning, 33*(3), 267-293. http://dx.doi.org/10.1111/1467-9604.12218

McMahon, M., Patton, W., & Tatham, P. (2003). *Managing life, learning and work in the 21st century: Issues informing the design of an Australian blueprint for career development*. http://hdl.voced.edu.au/10707/68613

Moote, J., & Archer, L. (2018). Failing to deliver? Exploring the current status of career education provision in England. *Research Papers in Education, 33*(2), 187-215. https://doi.org/10.1080/02671522.2016.1271005

National Skills Commission. (2022a). *Employment projections*. Australian Government. Retrieved 6 February 2023, from https://www.nationalskillscommission.gov.au/topics/employment-projections

National Skills Commission. (2022b). *Projecting employment to 2026*. Australian Government. Retrieved 6 February, 2023 from https://www.nationalskillscommission.gov.au/insights/projecting-employment-2026#:~:text=More%20than%20nine%20out%20of,will%20require%20post%2Dsecondary%20qualifications

OECD. (2019). *Career guidance policy review*. https://www.oecd.org/education/innovation-education/careerguidancepolicyreviewhomepage.htm

O'Shea, S, Austin, K, Pitman, T, Groves, O, Bennett, D, Coffey, J, Dollinger, M, Kilpatrick, S, Drane, C, Eckstein, D, & O'Donnell, N. (2023a). *Career development learning for students with disability. Audit of current practice*. National Careers Institute Partnership Grants, Department of Education, Skills and Employment. Retrieved from https://www.adcet.edu.au/cdl-hub

O'Shea, S, Austin, K, Pitman, T, Groves, O, Bennett, D, Coffey, J, Dollinger, M, Kilpatrick, S, Drane, C, Eckstein, D, & O'Donnell, N. (2023b). *Career development learning for students with disability. Background paper*. National Careers Institute Partnership Grants, Department of Education, Skills and Employment. Retrieved from https://www.adcet.edu.au/cdl-hub

O'Shea, S, Austin, K, Pitman, T, Groves, O, Bennett, D, Coffey, J, Dollinger, M, Kilpatrick, S, Drane, C, Eckstein, D, & O'Donnell, N. (2022a). *Best practice principles for career development learning for students with disability.* National Careers Institute Partnership Grants, Department of Education, Skills and Employment. Retrieved from https://www.adcet.edu.au/cdl-hub

O'Shea, S., Groves, O., Austin, K., & Lamanna, J. (Eds) (2022b). *Considering career development sustainability: Implications for research and practice*. Springer, UK. https://link.springer.com/book/10.1007/978-981-19-6637-8

Parliament of Victoria. (2018). *Inquiry into career advice activities in Victorian schools*. https://www.parliament.vic.gov.au/images/stories/committees/eejsc/Career_Advice_Activities/EEJSC_58-04_Text_WEB.pdf

QILT. (2021). *2021 Graduate outcomes survey*. https://www.qilt.edu.au/surveys/graduate-outcomes-survey-(gos)#anchor-2

Ranasinghe, R., Chew, E., Knight, G., & Siekmann, G. (2019). *School-to-work pathways.* NCVER, Adelaide. https://www.ncver.edu.au/research-and-statistics/publications/all-publications/school-to-work-pathways

Tinto, V. (2008). Access without support is not opportunity. *Inside Higher Ed*, June, 9 2008. Retrieved 9 Feb 2023 from https://www.insidehighered.com/views/2008/06/09/access-without-support-not-opportunity

Tomaszewski, W., Kubler, M., Perales, F., Clague, D., Xiang, N.& Johnstone, M. (2020). *Investigating the effects of cumulative factors of disadvantage*. Institute of Social Science Research, University of Queensland. https://espace.library.uq.edu.au/view/UQ:2a76ba9

United Nations. (2007). *Employment of persons with disabilities.* International Labour Office, Geneva. Retrieved from https://www.ilo.org/skills/pubs/WCMS_173498/lang--en/index.htm

United Nations. (2015). *General Assembly resolution 70/1, Transforming our world: the 2030 agenda for sustainable development*. https://sdgs.un.org/2030agenda

United Nations. (2020). *Sustainable development goals knowledge platform*. United Nations. Retrieved 19th May 2020 from https://sustainabledevelopment.un.org/?menu=1300

Yates, A., & Bruce, M. (2017). The future of career education in New Zealand secondary schools: A review of the literature. *Australian Journal of Career Development, 26*(2), 62-70. https://doi.org/10.1177/1038416217700421

Young, E. (2022, December 1). *Some people are "disabled". Others "live with" or "have a disability". Here's the difference between identity-first and person-first language*. ABC News: Live Blog. https://www.abc.net.au/news/2022-12-01/disability-language-identity-person-first/101597752

Appendices

Appendix 1

HRE2021-0219 Ethics Approval

04-May-2021

Name: Sarah O'Shea
Department/School: National Centre for Student Equity and Higher Edu
Email: Sarah.Oshea@curtin.edu.au

Dear Sarah O'Shea

RE: Ethics Office approval
Approval number: HRE2021-0219

Thank you for submitting your application to the Human Research Ethics Office for the project **National Career Development Learning Hub for students with disability**.

Your application was reviewed through the Curtin University Low risk review process.

The review outcome is: **Approved**.

Your proposal meets the requirements described in the National Health and Medical Research Council's (NHMRC) *National Statement on Ethical Conduct in Human Research (2007).*

Approval is granted for a period of one ye ar from **04-May-2021** to **03-May-2022**. Continuation of approval will be granted on an annual basis following submission of an annual report.

Personnel authorised to work on this project:

Name	Role
Groves, Olivia	Co-Inv
O'Shea, Sarah	CI
Pitman, Tim	Co-Inv
Bennett, Dawn	Co-Inv
Coffey, Jane	Co-Inv
Drane, Cathy	Co-Inv
Lamanna, Jodi	Co-Inv
Eckstein, David	
Dollinger, Mollie	
Austin, Kylie	
O'Donnell, Nuala	
Kilpatrick, Sue	

Approved documents:

Document

Standard conditions of approval

1. Research must be conducted according to the approved proposal
2. Report in a timely manner anything that might warrant review of ethical approval of the project including:
   - proposed changes to the approved proposal or conduct of the study
   - unanticipated problems that might affect continued ethical acceptability of the project
   - major deviations from the approved proposal and/or regulatory guidelines
   - serious adverse events
3. Amendments to the proposal must be approved by the Human Research Ethics Office before they are implemented (except where an amendment is undertaken to eliminate an immediate risk to participants)
4. An annual progress report must be submitted to the Human Research Ethics Office on or before the anniversary of approval and a completion report submitted on completion of the project
5. Personnel working on this project must be adequately qualified by education, training and experience for their role, or supervised
6. Personnel must disclose any actual or potential conflicts of interest, including any financial or other interest or affiliation, that bears on this project
7. Changes to personnel working on this project must be reported to the Human Research Ethics Office
8. Data and primary materials must be retained and stored in accordance with the Western Australian University Sector Disposal Authority (WAUSDA) and the Curtin University Research Data and Primary Materials policy
9. Where practicable, results of the research should be made available to the research participants in a timely and clear manner
10. Unless prohibited by contractual obligations, results of the research should be disseminated in a manner that will allow public scrutiny; the Human Research Ethics Office must be informed of any constraints on publication
11. Approval is dependent upon ongoing compliance of the research with the Australian Code for the Responsible Conduct of Research, the National Statement on Ethical Conduct in Human Research, applicable legal requirements, and with Curtin University policies, procedures and governance requirements
12. The Human Research Ethics Office may conduct audits on a portion of approved projects.

Special Conditions of Approval

It is the responsibility of the Chief Investigator to ensure that any activity undertaken under this project adheres to the latest available advice from the Government or the University regarding COVID-19

This letter constitutes low risk/negligible risk approval only. This project may not proceed until you have met all of the Curtin University research governance requirements.

Should you have any queries regarding consideration of your project, please contact the Ethics Support Officer for your faculty or the Ethics Office at hrec@curtin.edu.au or on 9266 2784.

Yours sincerely

Amy Bowater
Ethics, Team Lead

Best Practice Principles for CDL for students with disability (summary)

Based on close analysis of the literature in the field, interviews with key stakeholders and advice from experts in the field, the following Best Practice Principles have been developed:

- Principle 1: Career development learning (CDL) led or developed by professional career development practitioners supports activity that is based on high standards of practice and ethical behaviour and also leverages existing knowledge and resources.

- Principle 2: CDL co-designed with people with disability promotes the empowerment and agency of this group.

- Principle 3: CDL that foregrounds individuals' strengths/capabilities and is embedded in personal perspectives of success respects and develops the whole student.

- Principle 4: Universal Design for Learning (UDL) implemented across all CDL activities ensures universal access and support.

- Principle 5: A longitudinal lifecycle approach to CDL that is correlated with maturity and key decision-making points supports consistent career thinking, planning and decision-making.

- Principle 6: CDL provided within disability-inclusive, anti-discriminatory partnerships between industry, students, families/supporters, educational institutions and government agencies enhances student outcomes.

- Principle 7: Employers, teaching staff and career practitioners who are disability confident, aware of unconscious bias and with positive attitudes towards diversity and inclusion create respectful and equitable educational and employment contexts for students with disability.

- Principle 8: Anti-discriminatory, inclusive and accessible career information incorporated in all general career development materials supports awareness of CDL opportunities, resources and networks. It also promotes engagement with the networks for students with disability and their supporters.

O'Shea, S, Austin, K, Pitman, T, Groves, O, Bennett, D, Coffey, J, Dollinger, M, Kilpatrick, S, Drane, C, Eckstein, D, & O'Donnell, N. (2022). *Best practice principles for career development learning for students with disability.* National Careers Institute Partnership Grants, Department of Education, Skills and Employment. Retrieved from https://www.adcet.edu.au/cdl-hub