



Inclusion Australia

Fostering employment for people with intellectual disability: the evidence to date

Erin Wilson and Robert Campain

August 2020

This document has been prepared by the Centre for Social Impact Swinburne for Inclusion Australia as part of the 'Employment First' project, funded by the National Disability Insurance Agency.



Inclusion Australia



CENTRE
for SOCIAL
IMPACT



About this report

This report presents a set of 'evidence pieces' commissioned by Inclusion Australia to inform the creation of a website developed by Inclusion Australia as part of the 'Employment First' (E1) project.

Suggested citation

Wilson, E. & Campain, R. (2020). *Fostering employment for people with intellectual disability: the evidence to date*, Hawthorn, Centre for Social Impact, Swinburne University of Technology.

Research team

The research project was undertaken by the Centre for Social Impact, Swinburne University of Technology, under the leadership of Professor Erin Wilson together with Dr Robert Campain. The research team would like to acknowledge the contributions of Ms Jenny Crosbie, Dr Joanne Qian, Ms Aurora Elmes, Dr Andrew Joyce and Mr James Kelly (of the Centre for Social Impact) and Dr Kevin Murfitt (Deakin University) who have collaborated in the sharing of information and analysis regarding a range of research related to the employment of people with a disability.

Contents

| | |
|--|----|
| Background | 5 |
| About the research design | 6 |
| Structure of this report | 7 |
| Synthesis: How can employment of people with intellectual disability be fostered? | 8 |
| Evidence piece 1: Factors positively influencing the employment of people with intellectual disability | 10 |
| Evidence piece 2: The effect of parental expectations on employment of people with intellectual disability | 13 |
| Evidence piece 3: The role of family and friends in influencing employment for people with intellectual disability | 16 |
| Evidence piece 4: Effects of mainstream vs special schooling on employment outcomes for people with intellectual disability | 19 |
| Evidence piece 5: Year 12 completion as a predictor of employment for people with intellectual disability | 23 |
| Evidence piece 6: Effective transition from school to work and post-secondary education for people with intellectual disability | 25 |
| Evidence piece 7: The role of vocational education and training in employment and other outcomes for people with intellectual disability | 32 |
| Evidence piece 8: The role of University education in employment and other outcomes for people with intellectual disability | 36 |
| Evidence piece 9: The value of work-based learning for people with intellectual disability | 42 |
| Evidence piece 10: Work experience as a predictor of employment for people with intellectual disability | 46 |
| Evidence piece 11: Individual placement and support (IPS) for people with intellectual disability | 50 |
| Evidence piece 12: Customised employment for people with intellectual disability | 53 |
| Evidence piece 13: Work-focused circles of support for people with intellectual disability | 58 |
| Evidence piece 14: Mentoring to support transition and employment for people with intellectual disability | 61 |
| Evidence piece 15: Microenterprises and people with intellectual disability | 65 |
| Evidence piece 16: The role of interagency collaboration as a factor in facilitating employment for people with intellectual disability | 69 |
| Evidence piece 17: What are the outcomes of open employment for people with intellectual disability? | 73 |
| References | 79 |

Glossary

| Term | Definition |
|-------------|--|
| ABS | Australian Bureau of Statistics |
| ADE | Australian Disability Enterprise |
| AFDO | Australian Federation of Disability Organisations |
| ASBAT | Australian School based Apprenticeships and Traineeships |
| CIE | Competitive Integrated Employment |
| DES | Disability Employment Service(s) |
| DSP | Disability Support Pension |
| ECOS | Employment Circles of Support |
| I/DD | Intellectual and developmental disability |
| ILC | Information Linkages and Capacity Building |
| IPP | Integrated Practical Placement |
| IPS | Individual Placement and Support |
| NDCO | National Disability Coordination Officer (program) |
| NDIA | National Disability Insurance Agency |
| NDIS | National Disability Insurance Scheme |
| OECD | Organisation for Economic Co-operation and Development |
| PwD | People with disability |
| TAFE | Technical and Further Education |
| UK | United Kingdom |
| UN | United Nations |
| UNCRPD | United Nations Convention on the Rights of Persons with Disabilities |
| US / USA | United States (of America) |
| VET | Vocational Education and Training |
| VETis | Vocational Education and Training in Schools |

A note on terminology

Throughout this document the term ‘supported employment’ has been used to denote a job or job search that has elements of support provided to people with disability. This captures a wide range of practices and programs and is consistent with terminology in the United States and internationally. In Australia, however, readers may be familiar with the term ‘supported employment’ to mean employment within what were formerly known as ‘sheltered workshops’ and other forms of congregate disability-specific employment, now largely encompassed by Australian Disability Enterprises (ADEs). The Commonwealth government introduced the term in this way in 1987 as part of the then Commonwealth Disability Services Program. This is not the meaning of ‘supported employment’ adopted within this document.

Background

Inclusion Australia

Inclusion Australia is the national voice for people with intellectual disability, bringing together diverse state members who are connected to people with intellectual disability and who are committed to the shared vision of inclusion in all aspects of Australian life.

Project need

Based on the evidence and on their networks, Inclusion Australia report that for people with intellectual disability the path to open employment is not easy. Most do not look for open employment. Instead, they often go into non-work settings like day programs.

The decision about whether someone with intellectual disability attempts to find open employment is critical. Families are seen to play a very important role in making this decision for or with people with intellectual disability. However, information about why open employment is important to people with intellectual disability or how to navigate the intersecting systems that would facilitate this is not easy to access.

Parents have reported that the most straightforward option for post school activity for adult children with intellectual disability is to use National Disability Insurance Scheme (NDIS) funding in a way that does not interfere with receipt of the Disability Support Pension (DSP) and to commence at a Day Service or Australian Disability Enterprise (ADE). To date, these options have commonly resulted in the segregation of people with intellectual disability, and have not contributed to their economic participation in the open labour market.

Project aim

The purpose of the Employment First project was to make getting a job in open employment a more viable option for adults with intellectual disability through the provision of evidence-based information. Families, supporters and people with intellectual disability require clear, relevant and accessible evidence to facilitate navigating a pathway to open employment and help inform their decision-making. The project aimed to:

- Give families of people with intellectual disability evidence-based information in a factual, warm and non-judgmental way. This would include facts, figures and stories about the choices families make throughout the life of their family member with intellectual disability that support open employment for adults with intellectual disability – and explain why this is important;
- Make it easier for families to navigate key disability systems and the interfaces between these (e.g. Centrelink, Disability Employment Services (DES), the NDIS, and ADEs) in order to achieve open employment.

A major component of the project was the development of a dedicated plain-language, accessible online portal to bring together key employment pathway information, data and research, and present these from a person-first perspective. The evidence pieces, presented in this report, were commissioned as a major element of the evidence to inform the portal.

Overall, the project aimed to increase the opportunities for people with disability to access and pursue open employment through increased support and information available, via the website and related workshops, to individuals, families and other supporters.

About the research design

Research focus

Inclusion Australia commissioned the Centre for Social Impact to provide a set of 'evidence pieces' to summarise the evidence on a range of topics identified by Inclusion Australia.

Topics were identified following a workshop with stakeholders, convened by Inclusion Australia in November 2019, to identify key interest areas in relation to open employment for people with intellectual disability.

Topics were later collated into four areas:

1. The factors that contribute to or enable participation in open employment for people with intellectual disability including: casual employment / work experience; completion of year 12; expectations of parents, family and immediate supports; post school education.
2. Effect of mainstream versus special school participation on employment outcomes.
3. The supports/activities/programs that are effective in enabling participation in open employment for people with intellectual disability.
4. Outcomes of open employment for people with intellectual disability.

Method

Each topic was further disaggregated into discrete and relatively short evidence pieces. Given that evidence pieces were intended to be used to inform parents, carers and supporters of people with intellectual disability, a synthesis of the evidence rather than a formal literature review, was sought. Evidence pieces aimed to translate each relevant body of research into a format that could inform readers and support decision making. In this context, each evidence piece:

- Focused on topics and evidence of the most relevance to supporting increased open employment opportunities for people with intellectual disability;
- Drew together conclusions and findings from a range of evidence (academic and grey) in a way that succinctly explained the topic and provided guidance based on evidence;
- Specifically highlighted evidence that is based on samples of people with intellectual disability in Australia or similar contexts. Where there was no or insufficient evidence related to intellectual disability, other evidence was used with suitable caveats.
- Selected and prioritised evidence that was current and high quality, making succinct evaluative comments about the level and quality of evidence available.

However, while evidence pieces were targeted and written in a way to translate research for a non-academic reader, they were not written for direct use by people with intellectual disability. Managing communication to people with an intellectual disability is an ongoing activity of the wider project.

Searches of the literature were conducted by using search engines including EBSCOhost and Google Scholar, as well as by identifying relevant literature from reference lists. A wide range of search terms were used related to intellectual disability (including learning disability), as well as to the four main topic areas, and sub themes

within them. The literature review sought to identify existing literature reviews or meta analyses as a first search strategy. This included the use of a previous literature review co-authored by one of the authors and commissioned by the NDIA (Crosbie et al., 2019). In all, 188 separate sources were included in the review, including grey literature (such as program evaluation reports, submissions to inquiries, and service websites), academic publications (journal articles and book chapters), and government documents (policies, evaluations, inquiries and reports). The inclusion of already published literature reviews further substantially expanded this coverage.

A set of 17 evidence pieces were produced, each of between 2 and 7 pages in length (excluding references). These were then used by Inclusion Australia to inform content on the website and to be provided as links for further reading.

Comments on the evidence

Across the four topic areas, the evidence was alternately well established, patchy or non-existent. Some topics, such as Individual Placement and Support, have an extensive evidence base across multiple countries and including a high number of randomised control trials (i.e. top tier evidence). In other areas, while studies existed, their samples were small (sometimes only 4 or 5 people with intellectual disability) or mixed (including people with a range of disabilities). Finally, in other areas, such as the outcomes for students with intellectual disability leaving secondary education in Australia, the evidence has diminished to non-existent in recent years.

All evidence is produced in context and contexts were not always well described or comparable across the literature examined. The task of the researchers in this project has been to interpret the value of different evidence generated in diverse contexts and draw conclusions about what we might take from this to inform actions to support the employment of people with intellectual disability in Australia. However, given the diversity of evidence quality and context, the task is necessarily an interpretive one. This approach has its strengths as it enables inclusion of and engagement with a range of sources that might otherwise be excluded. Some reviews prioritise only evidence of a certain type or 'quality' and lay aside the emergent literature reported via other sources such as submissions to parliamentary inquiries or commissioned evaluations.

Overall, there is sufficient evidence to draw sound conclusions about the factors that support the employment of people with intellectual disability, and the types of programs that address these. However, there is also cause for concern that Australian governments appear to have invested little in generating evidence about the outcomes for this group. The case of the lack of evidence about the outcomes of special and mainstream education in Australia is a good example of this, where a small data set available in some states has diminished to no apparent public reporting in recent years.

Structure of this report

This report draws together the 17 evidence pieces about what we know influences the employment outcomes of people with intellectual disability. The pieces are organised in a logical way, commencing with an overview of the factors, progressing through to programs that have shown efficacy in addressing the employment needs of people with intellectual disability, and ending with the outcomes of open employment for people with intellectual disability.

Synthesis: how can employment of people with intellectual disability be fostered?

People with intellectual disability experience low rates of employment in Australia and around the world and, when they are employed, are less likely to work in open employment than their peers with other types of disability. In Australia, the majority of people with intellectual disability who work do so part time. This data suggests that preferences for part time work need to be accommodated in job design and employment policy.

The factors that contribute to these poor outcomes are self-reinforcing. Low expectations about the capacity of people with intellectual disability as workers, held by family members, employers, other stakeholders (such as teachers and careers advisors) and sometimes by people with disability themselves, lead to a lack of engagement with work as a life option, which in turn reinforces low expectations.

However, there is evidence that this negative circle can be broken. When people with intellectual disability gain paid and unpaid work and work experience, they, their families and employers witness their capacity for employment and the employer's capacity to accommodate them. As a result, expectations of all parties rise. When expectations about work are high to start with, opportunities for work experience and work increase. Taken together, raising expectations and access to work experience (of diverse types) dramatically increases employment outcomes in open employment. The evidence for this in regard to young people with intellectual disability is particularly strong.

Planning for this pathway to work is critical. There is evidence that this should formally commence by the age of 14 years and that quality transition planning from this age, complete with work experience and training opportunities (such as School Based Apprenticeships and Traineeships) will increase employment outcomes for young people with intellectual disability. This is in contrast to what is reported as current practice around short, limited transition planning conducted in the last year of school.

Planning the pathway to employment and 'discovering' the individual's preferences, interests, strengths and support needs in a work context is also a feature of programs for older adults with intellectual disability that result in employment. This high level of focus on the individual is critical and, in programs with evidence of success, is supported by skilled vocational or employment specialists.

There is clear evidence of what programs are successful in increasing employment for people with intellectual disability. However, the examples of these in Australia are limited and often temporary, despite good results. Features of effective programs (internationally and domestically) include:

- A high level of job customisation to suit the needs and interests of the individual with intellectual disability and the employer, including job carving, job sharing and job creation;
- Proactively seeking job opportunities and connecting individual jobseekers to employers, instead of waiting for job vacancies to be advertised;
- On-the-job training or on-site training mixed with work experience;
- Time un-limited support in the workplace to continue to acquire work-related skills and capacity to independently access and maintain employment;
- The role of employment brokers or vocational specialists to work across disability support services, health services (such as mental health services), employment services, training organisations, schools, employers, families and jobseekers, based on evidence-based models of practice.

Overall, the evidence offers clear mechanisms for supporting individuals with intellectual disability to gain employment. In the main, the necessary ingredients are a **combination of highly individualised strategies** (focused on the unique attributes of the person with intellectual disability and their context) **supported by programmatic structures** that deliver a range of supported opportunities.

Finally, this review focused on the factors effecting employment at the micro and meso levels of the 'employment ecosystem' (Nicholas et al., 2018), that is, those to do with supports for individuals with intellectual disability, families and employers. In addition to these factors, a range of barriers to employment exist at the macro level - the arena of government policy and public attitudes - that significantly construct and reinforce the low employment rate of people with intellectual disability. These include disability income support policy and disability employment policy and programs. A focus on macro level barriers to employment of people with intellectual disability were not part of this review, though a literature set including a number of public inquiries and international research is available to inform change in this area.

Evidence piece 1:

Factors positively influencing the employment of people with intellectual disability

The problem

People with intellectual disability experience low rates of employment in Australia and around the world and, when they are employed, are less likely to work in inclusive settings than their peers with disability.

In 2012, in Australia, only 39% of people with intellectual disability were in the labour force (including a mix of seeking employment, being employed in ADEs and open employment). This compares to 55% of people with other disabilities and 83% of people without disability in the labour force. Additionally, only 12% of people with an intellectual disability were employed full-time compared to 32% of people with other disabilities (ABS, 2012; Thoresen et al., 2018). More recent data does not distinguish between intellectual and other disabilities but overall there has been little change between 2003 and 2015, though the rate of employment of people with severe or profound activity limitation has decreased from 27% in 2003 to 22% in 2015 (Australian Institute of Health and Welfare, 2017). Data recently released by the National Disability Insurance Agency (2019) shows that 18% of NDIS participants with an intellectual disability aged 15-24 had a paid job, the same level as all NDIS participants (when taken as a group). Interestingly, NDIS participants with an intellectual disability aged 25 and above were more likely to be employed than their peers in the NDIS: 31% of people with intellectual disability were in a paid job compared to 23% of other NDIA participants, though paid work includes ADE as well as open employment settings.

People with intellectual disability have lower uptake of employment as they leave school and are more likely to leave the labour market in their 30s.

- On finishing school, people with intellectual disability are far less likely to move into post-secondary education or the labour force than their age peers without disability. In 2003, the labour force participation rate of those aged in their 20s was around 60% and between 34% and 46% for those aged in their 30s, well below the 85% participation by young adults without disability. Transitions out of the labour force were common at ages 30–34 years and onwards, possibly highlighting difficulties for people with intellectual disability in maintaining employment and a need for those who do leave a job to find alternative means of social participation (Australian Institute of Health and Welfare, 2008, pp. 2-3).

Why do people with intellectual disability have lower rates of employment than the general population?

Perceived 'unemployability' has been synonymous with the identity of adults with intellectual disability for the last century (Thoresen et al., 2018, p. 161).

There is no single factor that explains why people with disability have lower rates of economic participation than others. Research suggests that it is a result of the broader environment of negative attitudes, lack of supports for employers, the policy environment, as well as the aspirations and skills of people with disability, limited expectations of their parents and supporters, and a lack of supports available to assist them customise and undertake a job.

The solution

Overall, a wide range of international and Australian research has identified that people with intellectual disability can be employed in open employment, can complete apprenticeships, traineeships, vocational education and training courses, participate in some University programs, and be self-employed.

Provided adequate supports and training are in place, people with I/DD [intellectual and developmental disability] have significant long-term potential for securing competitive employment and living independently (Southward & Kyzar, 2017, p. 26).

The Australian Federation of Disability Organisations (AFDO) reinforces the importance of the provision of supports to people who need them. AFDO suggests:

Supported employment recognises the capacity of people with disability to work with the right ongoing supports in a variety of settings that include open (mainstream) employment, mobile crews, social enterprises and small businesses (AFDO, 2018, p. 4).

In countries with different employment policies and different employment related supports, people with intellectual disability experience vastly better employment outcomes than they do in Australia. While noting that it is difficult to compare data, Wakeford and Waugh (2014) point out that national statistics in the US identify that 76% of young people with intellectual disability experienced open employment across an eight year period, compared to only 25% of young people with intellectual disability in Australia.

This points to a need to shift expectations about and supports for employment. Evidence that this is occurring, with support, is provided within the Ticket to Work program, encompassing strategies in both mainstream and special schools:

Employment used to be aimed at those 'top edge' students particularly for those that can read and write. What we are now doing is moving that down the IQ scale, these kids do have employability skills. So, in our school we are raising the employment aspirations of all students in our school. We discuss careers and all types of employment such as paid full time, part time and casual employment as well as voluntary and supported employment..... It means that those students that used to do training and recreation programs at day services once leaving school can consider paid and volunteer employment also. It's a real recognition of what they can do and that they are all employable (Principal, special school, Ticket to Work partner) (Wakeford & Waugh, 2014, p. 19).

Factors that positively influence the employment of people with intellectual disability

Across Australian and international research, a range of factors have been identified to support the employment of people with intellectual disability, including those relating to the individual with disability, their supporters (families, friends, service providers), employers, and the broader policy environment. As a US researcher explains:

It is also important to note that due to the diversity of the population, the type of job, and available community and state resources, **no one model** [of pathways to employment] can possibly serve the workplace support needs of all people with disabilities (Wehman et al., 2018, p. 132).

Factors that have been identified as positively influencing employment outcomes for people with intellectual disability include:

- having early experiences to develop a view or vision of one's self as a worker
- having work experience, including a 'typical' pathway of work experience and paid work as the person grows up through teenage and adult years
- parental expectations
- expectations and support of family and friends (and accessing their social capital)
- effective transition support
- completing secondary school
- participating in post-secondary education
- customised employment
- individualised placement and support
- mentoring to support employment
- self-employment through microenterprise
- interagency collaboration.

Evidence piece 2:

The effect of parental expectations on employment of people with intellectual disability

What do we mean by parent expectations?

Parent expectations of, or aspirations for, their children are the broad ideas about what parents believe is realistic for their child's future (Martinez et al., 2012). The expectations parents – and others – hold can have a direct impact on the employment outcomes of youth with intellectual disability (Carter et al., 2017).

The problem

Research and public consultation have found that the aspirations of people with disability, and those of their family and carers, about participation in post-secondary education and employment are often limited (ACIL Allen Consulting, 2017; Chambers et al., 2004). Indeed, low expectations of parents is a commonly cited major barrier to employment for people with intellectual disability.

These low expectations, coupled with poor transition planning, lead to decision making that is focused on reducing risk, often resulting in choices that have a non-vocational focus (Hetherington et al., 2010; Redgrove et al., 2016; Gilson et al., 2018; Noel et al., 2017). Failure to explore the world of work also reinforces low expectations (Bellman et al., 2014; Blustein et al., 2016; Carter et al., 2017; Chambers et al., 2004; Luecking & Luecking, 2015; Lysaght et al., 2017).

What works as a solution?

There is a strong relationship between parent expectations and student outcomes for all students (both with and without disability) (Zhang et al., 2011).

Parent expectations have been found to influence:

- Student outcomes

- School graduation rates
- Employment after secondary school
- Participation in post-secondary education and training.

High expectations of what people with disability can achieve are an important indicator of their later employment (ARTD Consultants, 2019; Carter et al., 2017; Kirby et al., 2019). Hall et al. (2018, p. 208) argue that “parental expectation is the greatest predictor of paid work experiences” for people with intellectual and developmental disability, and this is reinforced in a range of research which finds that parental expectations are the strongest predictors of employment and post-secondary education for students with intellectual disability (Papay & Bambara, 2014, in Southward & Kyzar, 2017; Carter et al., 2012; Carter et al., 2017).

Longitudinal studies have found that high parent expectations (along with hands-on, authentic work experiences) are the key factors associated with employment two years post high school for students with intellectual and severe disability (Carter et al., 2012). Early modelling of work roles by parents and family members are powerful ingredients for the child in shaping the vision of their future life (Hall et al., 2018).

One US study reported that students with intellectual disability “whose parents expected they would be employed upon graduation of high school are ‘58 times more likely to be employed up to 2 years out of high school and 50 times more likely to be employed between 2 and 4 years out of high school than youth whose parents did not expect they would be employed’” (Papay & Bambara, 2011, as cited in Southward & Kyzar, 2017, p. 30).

Key ingredients of developing high parental expectations

A range of ingredients have been established as supporting the development of high parental expectations of their child with disability:

- Parents and families should be supported to **develop early positive expectations** of their child with intellectual disability’s employment future. Parents of young people report that it is important that they hold similar expectations for their child with a disability as they do for other children (Blustein et al., 2016; Francis et al., 2018).
- Parents should work to **maintain high expectations**. Parents of young people with intellectual and other disabilities reflecting on their experience advised parents to:

maintain a “picture” of young adults as “completely capable, independent, not on disability” benefits, “getting married” or “feeling connected and valuable” in their communities. Participants reported “always telling” young adults “all of the things they could accomplish”, including going to college, working and living in the community. Participants indicated that these demonstrations of high expectations resulted in young adults developing a positive self-concept and motivation to develop and achieve goals (Francis et al., 2018, p. 286).

To maintain high expectations, parents identified that they resisted letting their young person “get away with things” and held them accountable to expectations about housework, chores and homework (Francis et al., 2018, p. 286). Three strategies were specifically recommended: hold young adults accountable; expect that young adults will experience and overcome failure; locate positive examples of young adults in the community (Francis et al., 2018, p. 291).

- Parents and families should **be equipped with employment and transition knowledge**, such as how to utilise formal and informal supports including drawing on other family, friends and networks (Francis et al., 2013).

- The **service system should be a major source of support** and connect with families as early as possible to influence employment expectations (Hall et al., 2018, p. 210). There is evidence that parents and family members can be supported to raise expectations by:
 - accessing information and resources via training (Francis et al., 2013). For example, the Family Employment Awareness Training (FEAT) program in the United States, offering face to face training about integrated employment over two days, has been found to increase participants' expectations for competitive employment and knowledge of employment services and supports (Francis et al., 2013);
 - engaging people with intellectual disability in work experience as this offers the opportunity for people with disability to demonstrate their capabilities and to build expectations of those around them (Bellman et al., 2014; Chambers et al., 2004; Simonsen & Neubert, 2013; Skellern & Astbury, 2014);
 - accessing mentoring, training, and timely information and support to navigate systems. This has been shown to raise expectations of family members about post school employment and influence decision making (Carter et al., 2017; Chambers et al., 2004). The support of peers (i.e. other parents) has been noted to be particularly helpful (Francis et al., 2018).

Evidence piece 3:

The role of family and friends in influencing employment for people with intellectual disability

Who is influential in a young person's life and on their employment outcomes?

The people with whom we have a personal relationship are important influencers in most people's lives, including the lives of people with intellectual disability. Given that families (e.g., parents, siblings, other close relatives) "represent the most prominent and enduring sources of support and guidance" for people with intellectual disability (Gilson et al., 2018, p. 21), it is not surprising that they hold influential roles in relation to employment.

Social networks and contacts build social capital (Putnam, 2000) which is important to a range of individual outcomes including the employment success of persons with disability. Social networks impact the employment of persons with a disability in much the same way that they do for everyone else (Potts, 2005). Research has provided evidence that the following types of relationships can influence employment aspirations and outcomes for people with disability:

- Parents
- Family members
- Friends
- Teachers
- Transition advisors
- Peers (Lindsay et al., 2015; Antonelli et al., 2018; Carter et al., 2017; Chambers et al., 2004).

In the UK, in major government policy evaluations, supportive families have been found to be "a key element in encouraging people with learning disabilities to seek paid work" (Reddington & Fitzsimons, 2013, p. 128). In addition, research has found that alongside family, professionals such as teachers, paraprofessionals, job coaches, transition coordinators, "strongly influence the likelihood of competitive employment" (Francis et al.,

2013, p. 45). The influence and role of professionals becomes even more important for people who lack family support (Francis et al., 2013).

The problem

People with intellectual disability generally have low social capital with limited social networks (Potts, 2005). People with intellectual disability are less likely to be involved in community groups, and leisure activities (Verdonschot et al., 2009). An Australian study (Wilson et al., 2017) noted that many people with intellectual disability remain socially isolated and require support to overcome barriers and access social opportunities. Often the networks and friendships that do exist are closely linked to family relationships, peers with similar disabilities and service providers (Wilson et al., 2017). This limited social capital reduces the resources available to people with intellectual disability to support their aspirations for employment.

However, not only is their access to social capital limited, people with intellectual disability are typically surrounded by people who hold low expectations of them. Key supporters of young people with intellectual disability, including family members and teachers, hold low expectations about their capacity to undertake open employment and base their decisions on fear and concern for the person's safety and wellbeing, and a desire to reduce risk (Carter et al., 2017; Winn & Hay, 2009; Gilson et al., 2018). These low expectations often result in transition to non-vocational options (Hetherington et al., 2010; Redgrove et al., 2016).

What works as a solution?

A large body of research demonstrates that family expectations and support are predictors of employment for people with intellectual disability (Francis et al., 2013; Gilson et al., 2018; Nicholas et al., 2018). In three international studies:

family expectations of the student with I/DD [intellectual and developmental disability] securing competitive employment upon completion of high school were significantly associated with post-secondary competitive employment (Southward & Kyzar, 2017, p. 30).

Just as the network of people around a young person with disability can narrow and close off options by holding low expectations, the expectations that families, educators and others hold can have a direct impact on the employment outcomes of young people with intellectual disability (Carter et al., 2017; Midjo & Aune, 2018). Families can also act to foster higher expectations, broaden horizons and connect into employment and other opportunities.

Family members offer career-related advice, help the student find jobs, shape aspirations, and can offer practical and moral support to maintain employment (Southward & Kyzar, 2017, p. 34).

Social capital (that is the personal and professional networks) of those in the life of a person with disability seeking employment, is a critical component of success in fostering employment. In an Australian study of people with intellectual disability, participants frequently reported that they found their current employment:

via a personal connection through family and friends. In supported employment in ADEs, people generally spoke about their family or friends finding the job for them or recommending it to them. In open employment people were more likely to comment on family or friends passing on an advertisement; making a potential connection with an employer, which they then followed up themselves; or helping them to write

job applications ... Other people who helped in the search for work included teachers, career advisors, and people working in the management of ADEs (Meltzer et al., 2016, pp. 19-20).

Supports to employment, such as customised employment, rely heavily on the social capital around the job seeker with disability. In the customised employment approach, the social capital of family and friends, along with that of paid supporters, is critical. In one US study,

One example of social capital described was a mother who networked where she had been employed to create an opportunity for her son to have a work experience in the business. Another example of social capital was networking with a computer technician who [was willing to visit the individual with disability at home and] provided feedback on the job seeker's skills for taking apart computers (Inge et al., 2018, p. 164).

Ingredients of success

- **High expectations of those around the young person with intellectual disability.** Having parents and professionals holding high expectations for the future resulted in young adults developing a “positive self-concept and motivation to develop and achieve goals” (Francis et al., 2018, p. 286). A US study found that family expectation for paid work was the most significant unique predictor of paid work. Those whose family expressed an expectation for paid work were 3.58 times more likely to be working for pay after leaving school (Carter et al., 2012).
- **Role models.** Young people with disability also report that seeing positive examples of others operating in the real world contributes to their own high expectations (Francis et al., 2018). Research confirms that having early role models of work, among family and others of people with intellectual disability, can have a strong influence on the young person's vision of themselves in the future (Hall et al., 2018).
- **Increasing social networks and using them to connect to the world.** Strategies that promote social capital and development of relationships between people with disability and their community have been recommended in a range of research. Families, friends and associates are the connectors to these opportunities (ARTD Consultants, 2019; Carter et al., 2017; Nicholas et al., 2018; Sheppard et al., 2017). Young people also build their own social capital through membership of sporting clubs, being involved in activities such as scouts and guides and through involvement in community based activities. (Crosbie et al. 2019; Potts, 2005). Past work and educational experience are rich sources of social networks by keeping in touch with previous employers, fellow workers, teachers and students. Volunteering can also be a way of building social networks as well as providing work experience, especially if it involves the field a person wishes to be employed in (Bellman et al., 2014; Skellern & Astbury, 2014; Potts, 2005).

Evidence piece 4:

Effects of mainstream vs special schooling on employment outcomes for people with intellectual disability

What is meant by mainstream schooling and special schooling?

In Australia, students with disability can attend either mainstream or special schools.

A special school is one that enrolls only students with special needs. *Special schools* provide education for students that exhibit one or more of the following characteristics before enrolment: mental or physical disability or impairment; slow learning ability; social or emotional problems; or in custody, on remand or in hospital (ABS, 2019).

A mainstream school is one that enrolls students with and without disability, including providing classes to specifically support students with special needs and/or providing additional assistance to students with special needs in regular classes (Australian Institute of Health and Welfare, 2017a).

Mainstream schooling and special schooling – the impact on employment outcomes

1. THE VALUE OF EDUCATION

An effective education is vital for all young people – including those with disability - as an inadequate education will have consequences across the duration of a person's life. "Under-education leads to unemployment, lower levels of health, social isolation and a lifetime of disadvantage" (Senate Standing Committee on Education and

Employment, 2016, p. 4). Hence choice of schooling, and ongoing engagement with schooling, is vital to a person with intellectual disability and their life opportunities.

2. OUTCOMES OF MAINSTREAM VS SPECIAL EDUCATION

It is difficult to compare mainstream and special schools using the research evidence. The evidence suggests that outcomes of each will be significantly influenced by a range of factors at each site including the level of inclusion achieved, the level of resources available, as well as the expertise of the teaching staff (Casey et al., 2006). While the outcomes of mainstream compared special schools for people with intellectual disability remain in doubt, there is research to suggest that the aspirations of young people with intellectual disability for employment are the same regardless of setting (Casey et al., 2006).

a) Outcomes of mainstream schools

For children with intellectual disability, the opportunity to participate in mainstream schooling alongside their peers without disability is a human right. The Victorian Equal Opportunity and Human Rights Commission (2012) argues that:

There are profound consequences when students with disabilities are unable to participate in education on the same basis as students without disability – for the child, the family, the school and for the community. A person’s life chances, employment options, future earnings and value in society are largely determined by their education. Failing to ensure the participation of students with disabilities in education, and to maximise their learning outcomes, is not only discriminatory and unfair, it is also life-changing (p. 48).

However, overall, the evidence as to whether mainstream schooling or special schooling leads to better employment outcomes is limited and it is difficult to find good data on this topic, especially in Australia. Internationally, a set of older research concludes that “the small existing research base suggests that students with special educational needs achieve more, academically and socially, in a mainstream setting than in special schools” (Casey et al., 2006, p. 277). In the UK, one large scale study conducted in 2002 found that participation in mainstream education:

- increased aspirations for higher status employment
- increased aspiration to a higher level course and increased certainty about choice of post-secondary course (Casey et al., 2006, p. 285).

One Australian study tracked outcomes of students with intellectual disability leaving secondary school in QLD and found that 53% of students of mainstream schools were in paid employment (18% were in ADEs), compared to 44% (8% in ADEs) of students exiting special education units, and 15% (14% in ADEs) of students from special schools (Davies & Beamish, 2009). While samples were not matched, this suggests higher employment outcomes for students with intellectual disability from mainstream schools.

Data exists that attests to a range of other outcomes associated with mainstream education for children with intellectual disability, and that these outcomes have been found to positively influence employment outcomes in the future (Casey et al., 2006). There is evidence to indicate that mainstream schooling, increases:

- acquisition of social competence skills (Freeman & Alkin, 2000, reviewing 36 articles; Casey et al., 2006): “Through participation in general education classrooms, fully integrated children demonstrate better social behaviors such as adjustment, interactions, maturity, and general social competence as judged by others” (Freeman & Alkin, 2000, p. 16).
- academic language skills and reading skills (Dessefontet et al., 2012).

An Australian review of research found that children progress at least as well in inclusive education as in segregated settings, with a small (but possibly significant) academic benefit from inclusion (Jackson, 2008).

In addition, mainstream schools can offer the opportunity to develop an identity that is not predicated on disability. Placement in segregated settings, and low expectations, can limit opportunities for a person with intellectual disability to fully explore a sense of self and can reinforce the 'disability identity' (Midjo & Aune, 2018). Parents and professionals also influence the emerging identities of young people via the support they provide and attitudes they hold of who the young adults are and who they have the possibility to be (Morris, 2004, cited in Midjo & Aune, 2018). In this regard, parents and professionals, including teachers, can strongly influence the experience of a meaningful and valued working life and future dreams of involvement in interesting education and work (Midjo & Aune, 2018).

Recent National Disability Insurance Agency (NDIA, 2018) data compared children with disability (including intellectual disability) who are NDIS participants attending mainstream and special schools. The data showed that children attending mainstream schools were more likely to:

- be developing independence,
- have a genuine say in decisions about themselves,
- make friends outside the family,
- spend time with friends without an adult present.

Other research has shown that these elements, particularly the extent of social network and social capital, as well as the level of involvement in decision making in their employment goals, are all predictors of increased open employment of people with intellectual disability (Southward & Kyzar, 2017).

However, there is also evidence of negative outcomes of engagement of some children in mainstream settings. Professionals and parents need to be aware that children with intellectual disability in integrated classrooms might not necessarily experience high levels of classroom social acceptance. Targeted strategies may be needed to improve the social status of children with intellectual disability in mainstream education and ensure genuine inclusion, such as ensuring teachers and children are prepared for integration (Freeman & Alkin, 2000).

b) Outcomes of special schools

The UK study discussed above also found outcomes in favour of special school education. Young people with mild learning or behavioural disabilities attending special schools were more likely than their peers at mainstream schools to aspire to post-secondary education, although of a lower level (Casey et al., 2006).

The recent NDIA (2018) data discussed above found that children attending special schools were more likely to experience the following outcomes than those in mainstream settings:

- feel genuinely included
- be happy at school
- have parents/carers who feel informed of their child's goals at school
- have parents/carers who feel satisfied that the school listens to them in relation to their child's education.

While evidence related to school outcomes in Australia is extremely limited, some data shows outcomes of students leaving special schools (where the majority of enrolments are those with intellectual disability). A Queensland Government report (Next Step Team, 2018) showed that 371 students in special schools in Queensland completed Year 12 in 2017. Around three quarters of students provided data about their post-school destinations:

- 31% attended day services
- 22% were studying in post-secondary education
- 19% were not in the labour force or education and training
- 11% were in unpaid or volunteer work
- 7% were looking for work
- 6% were in supported employment
- 3% were in open employment
- 1% had an apprenticeship or traineeship.

This range of outcomes is similar to an earlier report from the Victorian Government (State of Victoria, Department of Education and Training, 2015). Victorian graduates of special schools, including those completing Year 12 or equivalent or VCAL, in 2014 reported outcomes of:

- 59% attending a day service
- 29% studying post-secondary education, mostly in a TAFE institution
- 15% employed, with 61% of these in an Australian Disability Enterprise.

Unfortunately, there is no recent data on outcomes of students with disability in Victoria (State of Victoria, Department of Education and Training, 2018), nor data to identify the outcomes of students with intellectual disability in mainstream schools to enable a comparison with the outcomes of special schools.

Evidence piece 5:

Year 12 completion as a predictor of employment for people with intellectual disability

Year 12 and senior years – the Australian Education System

School education is similar across all of Australia with only minor variations between states and territories. School education (primary and secondary) is compulsory between the ages of six and sixteen (Year 1 to Year 9 or 10). Senior secondary school runs for two years, Years 11 and 12 (Australian Trade and Investment Commission, n.d.). Senior years can include a range of activities including school-based vocational education and training, university entrance studies, school-based apprenticeships and traineeships and other programs of study.

The problem: Low educational attainment for people with intellectual disability

In Australia, people with disability have significantly lower rates of education attainment than people without disability. Recent Year 12 completion rates show that approximately 1 in 3 (32%) people with disability aged 20 and over, and 1 in 4 (25%) with severe or profound disability have completed Year 12 or equivalent (Australian Institute of Health and Welfare, 2017a, 2019a). This was much lower than people without disability who have a 62% completion rate of year 12. Unfortunately, there is little available data about the completion rates of students with intellectual disability in Australia in both mainstream and in special schools.

Educational attainment has a significant and ongoing impact on workforce participation. In all OECD countries in 2013, individuals with high educational qualifications had both the highest employment rates and the lowest unemployment rates when compared with individuals with lower educational qualifications (Australian Human Rights Commission, 2016).

Those who have completed Year 12 are more likely to continue with further education or training and have a more successful transition into the workforce (ABS, 2011, cited in Australian Institute of Health and Welfare, 2019b).

Low education achievement is associated with lower work participation and unemployment, a high risk of long-term socioeconomic marginalisation, and mental and physical health issues. For those with disability, school-non-completers are also far more likely to receive a disability pension or depend on various public benefits early in life (Myhr et al., 2018).

Those with intellectual disability have particularly high rates of unemployment when compared with other disability groups (Australian Human Rights Commission, 2016; Australian Institute of Health and Welfare, 2019a).

The solution: Secondary education completion as a predictor of employment

While the evidence aligning secondary education completion and employment for people with intellectual disability is limited, multiple research studies identify secondary school completion as a predictor of post-secondary open employment for people with disability (LoBlanco & Kleinert, 2013, Papay & Bambara, 2011, Shandra & Hogan, 2008, cited in Southward & Kyzar, 2017). One suggests that students with intellectual disability who successfully completed high school were 4.07 times more likely to secure open employment than those students who did not (LoBlanco & Kleinert, 2013, cited in Southward & Kyzar, 2017). It should be noted, however, that the research studies in this area compare results of many different types of senior secondary school programs (not solely university entrance studies) and also point to a range of additional factors associated with later employment.

Evidence piece 6:

Effective transition from school to work and post-secondary education for people with intellectual disability

What is transition from school to work and post-secondary education?

Understanding 'transition' is critical to developing an effective approach. Transition can be understood narrowly, as the movement from secondary school to a post-school option, or more comprehensively, as a longer period of development that involves the emerging adult identity of the child and longer term consideration of, and planning for, post-school options (Redgrove et al., 2016).

'School to work' transition refers to the critical socio-economic life changing period between approximately 15 to 24 years of age – a period when young individuals develop and build skills, based on their initial education and training that helps them become productive members of the society (World Bank, 2009, as cited in Wakeford & Waugh, 2014, p. 5).

Transition planning in the Australian context does not tend to adopt this longer term view of transition from school to work for young people with intellectual disability. Nor does an understanding of transition to adulthood for young people with intellectual disability encompass an understanding of a longer period of development over seven to twelve years in which young people develop capacities and skills necessary for employment and adult life (Redgrove et al., 2016). Instead, there is evidence that for young people with intellectual disability the transition from school to adulthood is assumed to occur immediately upon leaving school and entering adult services, without the extended period of discovery and broadened experience that accompanies their same-age peers without disability (Redgrove et al., 2016).

The period of transition is a complex and challenging time (Leonard et al., 2016). It is a time of heightened opportunities and new risks (Blacher, 2001) which challenge the individual, the family and the service system (Davies & Beamish, 2009).

The problem

Australia does not have a nationally consistent transition model for young people with intellectual disability leaving school and data is not collected at the national level to provide evidence of outcomes (Beamish et al., 2012).

People with intellectual disability typically experience poor quality, or a lack of, transition planning in moving from school into post school options which frequently results in uptake of segregated options such as day programs and Australian Disability Enterprises (or sheltered workshops in international contexts) (Wakeford & Waugh, 2014; Baer et al., 2011; Bouck, 2012; Foley et al., 2013).

Research in overseas settings suggests that despite 'Employment first' policies in some countries, such as the US, transition plans can lack a focus on employment.

research indicates that individualized transition plans for students with I/DD [intellectual and developmental disability] focus more on functional skills for independence and building social relationships than on gaining employment or pursuing post-secondary education (Southward & Kyzar, 2017, p. 26).

The common experience of transition, especially in Australia, is one of a short term process accompanied by narrowly focused transition supports, frequently targeting transitioning into adult support services, with little consideration of the individual needs and aspirations of the person (Davies & Beamish, 2009; Redgrove et al., 2016).

Families have reported that commencing a transition focus in the last year of school is too late given the complexity of barriers young people with disability face when leaving school (Foley et al., 2013). Parents describe the time of finishing school as a "cliff" (Davies & Beamish, 2009, p. 255), with little information provided about the options available to the young person which leads to short term decision making.

In Australia, the transition process is highly fragmented and siloed, with lack of - and barriers to - funding operating to discourage collaboration across services (ARTD Consultants, 2019; Davies & Beamish, 2009).

The solution (what are the ingredients of effective transition?)

Fortunately, transition has been the subject of a large amount of research, especially in the United States, and more recently in Australia (ARTD Consultants, 2019; Ashburner, Bobir, & van Dooren, 2018; Baer et al., 2011; Davies & Beamish, 2009; Kohler et al., 2016; Kohler & Field, 2003; Smith et al., 2017). This research has established an evidence base of what works in transition. This research, now over three decades in longevity, shifts attention from short term 'planning' to a broader perspective referred to as "transition-focused education ... which views transition planning not as an add-on activity" but underpinning education programs and extra curricula activities across multiple years (Kohler & Field, 2003, p. 176).

Ingredients of an effective transition approach:

| Name | Description |
|--------------------|---|
| Self determination | <p>A focus on self-determination, “i.e. engaging in goal-directed, self-regulated, autonomous behaviour or the involvement of students in transition goal-setting activities” (Davies & Beamish, 2009, p. 255) is critical (Papay & Bambara, 2014). Within a transition context, this might include teaching self-determination skills and behaviours as part of transition (Davies & Beamish, 2009).</p> |
| Clear expectations | <p>A core element of an effective transition approach is the expectation that young people can work (ARTD Consultants, 2019).</p> |
| Family centred | <p>Family involvement in transition planning is considered best practice (Papay & Bambara, 2014). Family-centred transition planning processes help to increase student and parent expectations for the future, self-determination, and vocational decision making amongst young people with disability (Sheppard et al., 2017). Parent engagement should include:</p> <ul style="list-style-type: none"> - engagement in training opportunities and information sessions at school about post-school and community-based services - introductions to employment services - family visits to adult service agencies - exploring role models who can provide a vision to the young person and their family of what adult life might be like - being part of family support groups focused on transition to adulthood issues, including seeking and finding employment - actively building networks in the community - actively supporting the young person’s growing independence over time - engagement in supporting students in domains of life beyond work such as recreation and leisure, continued education and community participation (Sheppard et al, 2017). <p>Young people with intellectual disability whose parents and families expect them to be employed upon completing school are significantly more likely to be employed, with one study finding this to be 58 times more likely (Southward & Kyzar, 2017).</p> <p>Family-centred transition planning also listens to families’ concerns, such as concern for safety in the workplace or impact of wage on income support payments, that might be impacting their expectations and preferences (Southward & Kyzar, 2017).</p> |
| Individualised | <p>Individualised transition planning is considered best practice (Papay & Bambara, 2014). Individualised transition plans should be based on the young person’s strengths, preferences, needs and interests (Kohler & Field, 2003). Transition can be linked to Individual Education or Learning Plans (IEP/ILP) within schools, with research showing that where plans included individualised goals related to</p> |

| Name | Description |
|---|---|
| Early | <p>gaining paid employment, this increased employment outcomes (Southward & Kyzar, 2017).</p> <p>Early transition planning or focus for young people with disability leads to improved employment outcomes (Baer et al., 2011; Luecking & Luecking, 2015; Test et al., 2009; Cimera et al., 2011; Andersén et al., 2018; ARTD Consultants, 2019; Bouck, 2012; Kohler & Field, 2003; Sheppard et al., 2017; Cimera et al., 2014). Transition planning should commence by the age of 14 (for instance, this is the mandated age for transition planning for people with disability in the United States) which aligns with career development planning programs for students without disability which usually commence at working age. There is strong evidence from large scale studies of people with intellectual disability in the United States, that commencing transition planning at 14 years, compared to 16 years, results in significantly increased employment outcomes (Cimera et al, 2014). When interviewed about transition experiences, US parents and young adults with intellectual and other disabilities advised: “start ... successful transition [planning] ... earlier,” even as early as “elementary school” or “preschool, where the presumption still is that everyone can learn anything” (Francis et al., 2018, pp. 285-286). Australian research supports the suggestion that transition should commence by age 14:</p> <p style="padding-left: 40px;">early planning allows students to familiarise themselves with the post-school environment, set goals for the future, learn the skills that will assist towards meeting those goals, and make adjustments if goals or desires change (Meadows, 2012, as cited in Wakeford & Waugh, 2014, p. 21).</p> |
| Collaborative and including active involvement of person with intellectual disability | <p>Transition planning needs to be highly collaborative between the school, the person with disability, family members and key services (Kirby et al., 2019; Papay & Bambara, 2014). Several studies show that where the student with intellectual disability actively took part in transition planning, they were four times more likely to experience employment outcomes. This is linked to evidence that goal setting is motivational for young people with intellectual disability and builds independence (Southward & Kyzar, 2017).</p> |
| Systematic and structured | <p>Transition planning must be a systematic and structured process in which stakeholders and agencies collaborate to provide a continuum of services individualised to the person (Kohler & Field, 2003).</p> <p style="padding-left: 40px;">Transition-oriented schools focus also on systematic community involvement in the development of educational options, community-based learning opportunities, systematic inclusion of students in the social life of the school, and increased expectations related to skills, values, and outcomes for all students (p. 179).</p> |
| Career development AND skills training | <p>Transition requires provision of high-quality career development coupled with skills training (and work experience) to enable people with disability to explore</p> |

Name

Description

their interests and develop workplace skills. As described by Fields and Demchak (2019):

To successfully respond to the challenges associated with transitioning a student with an intellectual disability (ID) into employment, secondary schools must devise and implement an effective **school-to-work curriculum that provides vocational skill instruction** (Carter et al., 2009) and that seeks to **engage the employment opportunities available within the local community** (Brooke, Revell, & Wehman, 2009). Hart, Barnett, and Crippen (2014) suggest that an appropriate transition curriculum for students with ID should incorporate **real-world, community-based vocational training experiences** (p. 128, emphasis added).

The Transition to Work program in Australia, argues that it is particularly successful with transition to work outcomes because the employment pathway is often activated, via a school based apprenticeship model, *while the student is still at school* (Wakeford & Waugh, 2014).

Ticket to Work connects young people with disability to training and employment opportunities in their community whilst they are still in school; making the likelihood of a seamless transition from school and into employment more attainable for these young people (Wakeford & Waugh, 2014, p. 20).

Work experience

Work experience has been found to be the strongest predictor of gaining open employment for people with intellectual disability and is a critical part of any transition process. It both builds skills and knowledge of the young person, as well as builds expectations of parents and families (Southward & Kyzar, 2017).

Long term perspective

Career planning should have a **long-term perspective** that aims to support the person as their needs and aspirations change over time and they mature.

Transition programs/activities that work

There are a number of examples of innovative transition programs that have demonstrated effectiveness in improving pathways for young people with disability to good quality vocationally oriented post school options. These include:

- Ticket to Work
- Project SEARCH

1. TICKET TO WORK

Ticket to Work is a national program of the National Disability Services, Australia, that supports networks of partners in local regions who work to provide opportunities for young people with disability to build employability while they are at school (mainstream or special schools) (ARTD Consultants, 2019). Partners include schools, Disability Employment Services, TAFE/RTOs, employers, disability services and others, who

work together to provide young people with access to career development, workplace preparation, work experience, vocational skills and Australian School Based Apprenticeships and Traineeships (ASbATs). Essentially each Local Network supports young people with disability to participate in the same 'typical' transition to employment activities that their non-disabled peers generally partake in (Wakeford & Waugh, 2014, p. 6).

Ticket to Work includes a range of career and employment development activities conducted in school:

- Vocational Education and Training at secondary school
- Australian School based Apprenticeships and Traineeships (ASbAT)
- Work experience/placement
- Career development through customised employment techniques
- After school work
- Self-employment during secondary school (microbusiness) (ARTD Consultants, 2019, p. 8).

Ticket to Work participants (around 53% of those being young people with intellectual disability) have been supported to undertake the majority of their vocational training 'on the job' as much as possible "demonstrating competency by actually undertaking tasks in the workplace setting" which leads to better employment outcomes for young people with intellectual disability (Wakeford & Waugh, 2014, p. 23).

Two evaluations of Ticket to Work have evidenced that it is a successful transition model, with participants being more likely to be employed (64%) than the comparison group (33%), as well as be more likely to complete year 12, undertake post-secondary education, be more socially active and more independent (ARTD Consultants, 2019).

2. PROJECT SEARCH

The Project SEARCH Transition-to-Work Program originated in the United States with a primary target of assisting young people with intellectual disability. It is a "business-led, one-year employment preparation program that takes place entirely at the workplace" (Project SEARCH, n.d.) combining classroom-based training (onsite in the workplace), career exploration, and a range of work experience through worksite rotations. In the original model in the US, students in the last year of secondary school rotate through three different internships of 10-12 weeks each. The focus is on intensive on-the-job training supplemented by classroom learning (Wehman et al., 2018). Project SEARCH has been widely evaluated and achieves on average employment rates of 83% (Christensen & Richardson, 2017). The model has been extended to multiple countries including the UK, where it is part of a "supported internship" approach. These programs are "based mainly on employers' premises, with some time in college or a classroom in the workplace. Support throughout the study programme is provided to both the young person and the employer through a Job Coach" (Preparing for Adulthood, n.d.). Project SEARCH or 'supported internships' for young people with intellectual disability have been running in the UK for approximately 8 years with significant employment results (Brine & Kiernan, n.d.).

a) a) Integrated Practical Placement (IPP) program

A similar program, adapting the Project Search model, has been run in Australia. The Integrated Practical Placement (IPP) program has been run twice by the Royal Children's Hospital Melbourne and Holmesglen (TAFE) in 2018 and 2019 for 10-12 students with 'learning disability' undertaking Certificate 1 in Work Education (WISE Employment, n.d.). Students completed three nine-week placements within the hospital during the year including in the areas of human resources, medical records, allied health, volunteer and family services, the early learning centre, kitchen, mailroom and equipment departments (Holmesglen, n.d.). An independent evaluation found that 80% of students of IPP attained paid employment or paid traineeships compared to 35% who completed the Certificate in the usual TAFE setting without being part of the IPP program. IPP participants also experienced other outcomes such as increased confidence, independence and maturity (White et al., 2019). Recommendations of the evaluation suggest that this 'gold standard' program is suited to large scale employers of 3000 or more which afford a variety of placement opportunities for students (White et al., 2019).

Evidence piece 7:

The role of vocational education and training in employment and other outcomes for people with intellectual disability

The right to post-secondary education

Australia is a signatory to the United Nations Convention on the Rights of Persons with Disabilities (UN, 2006), and has agreed to implement these rights in Australia. The UNCRPD, Article 24, affirms the right of people with disability to “access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others.” Various Australian Government policy and legislation echoes this right including the Australian Disability Standards for Education (Department of Education, Skills and Employment, 2005) which supply “a framework to ensure that students with disability are able to access and participate in education on the same basis as other students” (Department of Education and Training, 2015, p. 1).

What are the post-secondary education options?

There are two main post-school education options in Australia: tertiary or university level education, and vocational education and training (VET) often known as TAFE. However, it is important to note that while these are called ‘post-secondary’, there are opportunities to commence some of these options whilst still undertaking secondary education in mainstream or special schools.

Vocational Education and Training

Australia's Vocational Education and Training (VET) sector is based on a partnership between governments, industry and other stakeholders. "The VET system provides training for entry level jobs through to highly technical occupations, but also provides training for non-employment related reasons" (Productivity Commission, 2020b, p. 5.1). VET provides practical skills and knowledge for a wide range of careers including trades, office work, hospitality, technology, health and community services and logistics. VET qualifications are provided by registered training organisations (RTOs) which include government institutions called Technical and Further Education (TAFE) institutions, as well as private institutions (Australian Trade and Investment Commission, 2016, p. 26), including many Australian Disability Enterprises (ADEs).

VET is open to a wide range of applicants including those entering the workforce for the first time, re-entering the workforce, upgrading work skills for an existing job, or retraining for new work. Students can choose to undertake a single subject/unit of competency, module, skill set or VET qualification from Certificate level I to Graduate Diploma level (Productivity Commission, 2020b). These include:

- Full apprenticeships and traineeships or partial/selected units of competence to upgrade skills;
- Certificates I and II for literacy, numeracy, life skills, communication, foundation occupation & trade skills;
- Certificates III and IV for industry specific training for particular occupations;
- Diplomas and Advanced Diplomas for advanced industry skills and pathways to higher education.

In addition, VET is available in secondary schools through the "VET in schools" program (Productivity Commission, 2020a).

The problem – the low rates of post-secondary education for people with intellectual disability

Young adults with intellectual disability often share the same aspirations as other students without disabilities about attending post-secondary education and gaining skills needed to obtain employment (Carnevale et al., 2010, cited in Wehman et al., 2018). However, the expectation for students with intellectual disability to attend university/college¹ and other forms of post-secondary education has not been adequately appreciated by families and many relevant professionals (Butler et al., 2016).

This lack of knowledge of the advantages of post-secondary education for people with intellectual disability contributes to low numbers of enrolments. Despite its impact on later opportunities, people with intellectual disability are far less likely than their age peers without disability to move into post-secondary education – both internationally and in Australia (Australian Institute of Health and Welfare, 2008; Davies & Beamish, 2009; Stanwick, Forrest, & Skujins, 2017). While there is no recent data, the Australian Institute of Health and Welfare found that based on 2003 data, the proportion of 20-24 year olds with intellectual disability who participated in

¹ Some of the studies referenced throughout are based on research in the US and tend to use the term 'college'. While there are distinctions in relation to course structures, 'college' and 'university' are frequently interchangeable and simply refer to education at the tertiary level.

post school education was approximately 9%, while for those over 25 years it was less than 5% (Australian Institute of Health and Welfare, 2008).

For youth with intellectual disability, there is a large disparity in education and employment outcomes. A significant body of evidence from the United States shows that among all disability groups, youth (aged 16-26) with intellectual disability have lower rates of preparation for work after high school and lower rates of postsecondary education participation (Miller et al., 2019). Further, when students do attend post-secondary education, retention of students to degree completion remains a widespread issue (Wehman et al., 2018).

Outcomes of Vocational Education and Training (VET)

Studies both in Australia and internationally have been able to identify a number of benefits of VET for people with disability, including those with intellectual disability.

- VET is a way of **improving employment prospects** for people with a disability (Cocks et al., 2013; Cavanagh et al., 2019; Southward & Kyzar, 2017). In Australia, 73.7% of students with disability who graduated from VET programs in 2018 were employed or continued to further study. 45.5% of graduates from VET in 2018 who had a disability improved their employment status as a result of their VET studies. This includes getting a job when they previously did not have one, or getting a job benefit such as being promoted to a higher skill level job (Productivity Commission, 2020b). An Australian study found that completing a VET qualification increases the chances of employment and improves the chances of continuous job tenure two to three years after completion, and that completing a VET qualification may indicate to employers that their disability does not affect their ability, motivation and commitment to perform employment and general tasks (Cavanagh et al., 2019).
- **Positive economic outcomes** are achieved through participating in apprenticeships and traineeships for people with a disability evident in rates of income comparable to similarly aged Australians without disability (Cocks et al., 2013).
- **Productivity improvement** may be achieved following a VET program to enable people with a disability to meet their job tasks (Polidano & Mavromaras, 2011).
- Developing **new skills** including teamwork skills and the developing of skills in handling different situations, while fostering a professionalism and work ethic (Southward and Kyzar, 2017).
- The **retraining of learned skills and abilities** for people with intellectual disability can be done through a VET Program (Cavanagh et al., 2019).
- The **confidence** of people with intellectual disability can be increased by undertaking VET and employment (Cavanagh et al., 2019).
- Vocational training has **improved the quality of life** of people with intellectual disability and enhanced a life more compatible with their wishes and needs (Gomes-Machado et al., 2016).
- **Social benefits** for people with disability in participating in apprenticeships and traineeships were identified by Cocks and Thoresen (2013) in their longitudinal study into social and economic outcomes for apprenticeship and traineeship graduates with disabilities: As summarised by Wakeford and Waugh (2014), “social outcomes included formal memberships of community groups and clubs as well as informal relationships with friends and acquaintances in the workplace” (pp. 24-25). Gomes-Machado et al. (2016) evidenced “an expansion of sociability through interpersonal relations with colleagues” (p. 38).

Ingredients of success: VET for people with intellectual disability

While programs vary, studies have been able to identify some of the components of VET that lead to positive outcomes for people with disability – including intellectual disability.

- VET or VETis (VET in schools) which include some form of **work-based training such as apprenticeships and traineeships** are strong vocational pathways with good employment outcomes for young people with disability (Cocks et al., 2013). Wakeford and Waugh (2014) note that this may be “because of the employment or on-the-job relationship embedded in the apprenticeship and traineeship models. ... Likewise, training that involves practical experience in the workplace is more likely to lead to employment for young people with a disability” (p. 23).
- **Observation and feedback** of/to people with intellectual disability to develop their skills has been identified in studies as the key to vocational training (Gomes-Machado et al., 2016, p. 33). Observers play a crucial role in providing insights and feedback for primary participants about the actions undertaken (Rantatalo et al., 2019).
- An Australian study outlined the value of **social support** in assisting people with disability to successfully complete vocational education (Polidano & Mavromaras, 2011).
- The development of self-determination skills that enhance the ability to make decisions regarding the questions that affect one’s life and to act on the basis of these choices, should be a key focus of the vocational training process. Training must **reinforce the activities that develop autonomy** and minimise gradually the need for assistance and support in the work environment (Gomes-Machado et al., 2016).

Evidence piece 8:

The role of University education in employment and other outcomes for people with intellectual disability

The right to post-secondary education

Australia is a signatory to the United Nations Convention on the Rights of Persons with Disabilities (UN, 2006), and has agreed to implement these rights in Australia. The UNCRPD, Article 24, affirms the right of people with disability to “access general tertiary education, vocational training, adult education and lifelong learning without discrimination and on an equal basis with others.” Various Australian Government policy and legislation echoes this right including the Australian Disability Standards for Education (Department of Education, Skills and Employment, 2005) which supply “a framework to ensure that students with disability are able to access and participate in education on the same basis as other students” (Department of Education and Training, 2015, p. 1).

What are the post-secondary education options?

There are two main post-school education options in Australia: tertiary or university level education, and vocational education and training (VET) often known as TAFE. However, it is important to note that while these are called ‘post-secondary’, there are opportunities to commence some of these options whilst still undertaking secondary education in mainstream or special schools.

Universities and higher education providers

Australia's higher education system is made up of universities and higher education providers. There are 125 registered higher education providers in Australia, including 43 universities with over one million enrolled students (Australian Trade and Investment Commission, 2016, p. 27).

Higher education is open to those over 17 years of age and admission requirements are variable by State/Territory and course. In Victoria they include:

- satisfactory completion of an Australian or overseas Year 12 program (for example VCE, IB, HSC, or equivalents from interstate or overseas). This includes the satisfactory completion of the VCE and Units 3 and 4 of one of the following English studies: English, English as an Additional Language, Literature or English Language.
- some higher education providers will consider senior secondary qualifications like Senior VCAL.
- completion of any part of a tertiary qualification at Certificate IV level or higher. For example, Certificate IV, Diploma, Advanced Diploma, Associate Degree and Degree studies, or overseas equivalents (Victorian Tertiary Admissions Centre, n.d.).

The problem – the low rates of post-secondary education for people with intellectual disability

Young adults with intellectual disability often share the same aspirations as other students without disabilities about attending post-secondary education and gaining skills needed to obtain employment (Carnevale et al., 2010, cited in Wehman et al., 2018). However, the expectation for students with intellectual disability to attend university/college² and other forms of post-secondary education has not been adequately appreciated by families and many relevant professionals (Butler et al., 2016).

This lack of knowledge of the advantages of post-secondary education for people with intellectual disability contributes to low numbers of enrolments. Despite its impact on later opportunities, people with intellectual disability are far less likely than their age peers without disability to move into post-secondary education – both internationally and in Australia (Australian Institute of Health and Welfare, 2008; Davies & Beamish, 2009; Stanwick, Forrest, & Skujins, 2017). While there is no recent data, the Australian Institute of Health and Welfare found that based on 2003 data, the proportion of 20-24 years olds with intellectual disability who participated in post school education was approximately 9%, while for those over 25 years it was less than 5% (Australian Institute of Health and Welfare, 2008).

For youth with intellectual disability, there is a large disparity in education and employment outcomes. A significant body of evidence from the United States shows that among all disability groups, youth (aged 16-26) with intellectual disability have lower rates of preparation for work after high school and lower rates of post-secondary education participation (Miller et al., 2019). Further, when students do attend post-secondary education, retention of students to degree completion remains a widespread issue (Wehman et al., 2018).

² Some of the studies referenced throughout are based on research in the US and tend to use the term 'college'. While there are distinctions in relation to course structures, 'college' and 'university' are frequently interchangeable and simply refer to education at the tertiary level.

Outcomes of University Education

A range of studies have demonstrated the benefits of a university education. While the components of the education will vary across programs the evidence indicates a consistent range of outcomes:

- Persons with and without disabilities who have undertaken post-secondary education experience **higher rates of employment and income**. Data over a range of studies, particularly in the U.S., Canada and the U.K., demonstrates the pattern of increased employment for individuals with intellectual disability who attended university programs (Moore & Schelling, 2015). Education offers a variety of advantages for individuals, with more education resulting in higher rates of employment, regardless of disability (Smith et al., 2012; Butler et al., 2016).
- In studies in the US, employees with intellectual disability who have post-secondary educational experience **work more hours and earn higher wages** across a wider range of occupations than youth with less education (Wehman et al., 2018; Grigal et al., 2011).
- Through inclusive academic coursework and continual opportunities for social involvement on campus, US college students with intellectual disability **learn skills** needed for employment success as well as communication and self-advocacy skills (Wehman et al., 2018; Rillotta et al., 2020).
- The **building of social capital** occurs through involvement in co-curricular activities. Students with intellectual disability enrolled in US colleges experience college life alongside their peers, meet new people and form friendships (Uditsky & Hughson, 2008; Rillotta et al., 2020).
- Those attending education while undertaking independent living learn and practise **independent living skills** – e.g. cooking, cleaning, shopping, paying bills (Ryan et al., 2019).
- University participation leads to **positive academic outcomes and accomplishment of personally set goals** (Miller et al., 2019; Uditsky & Hughson, 2012).
- University participation enables the building of **self esteem, self confidence and independence** in a context where young people with intellectual disability see themselves as similar to their peers without disability (Rillotta et al., 2020).

Ingredients of success: University education for people with intellectual disability

Around the world, there is an increase in targeted post-secondary education programs that have been specifically designed to foster inclusion of people with disability in university education. These programs have been designed to allow young adults with disabilities to gain “academic, social, employment, self-determination and independent living skills” (Francis et al., 2018, p. 278).

As outlined above, research has evidenced positive outcomes of these programs targeting people with disability including increased employment and independent living skills (Francis et al., 2018). Research has also identified some of the key components of these programs for people with intellectual disabilities. Without these components, students’ experiences can be less positive, especially where they have inadequate support, are subject to low expectations, and experience non-inclusive practices on campus (Rillotta et al., 2020).

According to a study by Uditsky and Hughson (2012), authentic student experience unfolds in at least five contexts that weave together to encourage belonging, learning, identity, and contribution:

1. “Academic: Students pursue a coherent program of study in course-related activities that develop their capacities.
2. Social: Students make friends, connect with social networks, and pursue a social life in company with fellow students.
3. Associational: Students join and participate in organisations that reflect their interests and concerns.
4. Employment: Students explore their options for work through internships, career guidance, and part-time and summer jobs.
5. Family: Students assume a new place in their families as their competence, confidence, and autonomy grow and new possibilities emerge” (pp. 299-300).

There must be conscious, systematic, creative, collaborative efforts to minimise the differences that can pull students away from these typical and valued pathways (O’Brien et al., 2009; Uditsky & Hughson, 2008).

Further key components of university/college programs identified as important for the experience of young people with disability include:

- Provision of extra instruction, academic support and coaching (Grigal et al., 2012; Moore & Schelling, 2015; Thoma et al. 2011; Ryan et al., 2019).
- Career-related preparation including:
 - career discovery practices to identify the unique strengths and interests of individual students (Scheef, 2019)
 - vocational experience through networking and internship/job placement (Gilson & Carter, 2016; Skellern & Astbury, 2014; Ryan et al., 2019)
 - employment officers and job coaches to support students in accessing employment opportunities (Skellern & Astbury, 2014 Ryan et al., 2019)
 - open days and job shops (Skellern & Astbury, 2014 Scheef, 2019).
- Access to support to meet daily mental and physical needs, such as via classmates and personal carers (Uditsky & Hughson 2012).
- Scholarships and grants availability to students and families who do not have the financial resources to cover these costs (Uditsky & Hughson 2012).
- Flexibility in the schedules of students and staff (Scheef, 2019).

Programs and Evidence

There are three main models of university education for people with disability:

1. Fully inclusive models (with individual support):
Students with intellectual disability attend mainstream college courses, including certificate or degree programs (for audit or credit), participate in mainstream on campus social activities and may engage in career and employment related activities.
2. Mixed or hybrid models:
Students with intellectual disability can attend mainstream academic classes (for audit or credit) and/or social activities on campus, while also participating in life skills or transition classes with other students with disabilities.
3. Substantially separate or segregated models:
Students with intellectual disability only attend classes with other students with disabilities (i.e. life skills or transition programs). Career development and work experience may be included (Rillotta et al., 2020).

Since 2008, the United States has been implementing Transition and Post-Secondary (university/college) programs for students with intellectual disabilities, using inclusive and hybrid models:

What we know thus far from the relatively recent emergence of these postsecondary educational programs is that college experiences provide a viable and unique pathway to CIE [competitive integrated employment] ... and that participation in postsecondary education significantly increases the odds of successful employment for students with IDD [intellectual and developmental disability] (Wehman et al., 2018, p. 137)

The 'Think College' project in the United States has been operating since 2010 and promotes the inclusion of people with intellectual disability in college based programs. Higher education colleges receive funding to create, expand or enhance higher education programs to include students with intellectual disability (Grigal et al., 2019), utilising all three models above. In 2018, 57 colleges and universities across the US participated with 981 students with intellectual disability enrolled (89% between 18-25 years, though ages ranged to 45 years of age). Programs include enrolment in mainstream higher education courses (58% of enrolments are in these) as well as specialised programs (usually related to life, social and career skills) open only to students with intellectual disability (Grigal et al., 2019). Students selected different types of credentials from their experience: 29% of students with intellectual disability enrolled in standard courses; 28% enrolled in non assessed courses, and 34% had a special credential created as part of the Think College program. In 2018-2019, 37% of students had paid employment while they studied, with this figure increasing to 57% when also including those in paid work-based experience programs. 52% of students had a paid job at or within 90 days of exiting the program, and 64% of past graduates had a paid job one year after exit. This outcome data is compelling when compared with the national employment average of 18% of people with intellectual disability in the US (Grigal et al., 2019).

Research on similar programs in the US where students with intellectual disability experience inclusive higher education reports that such programs show a rate of employment for completing students that exceeds 70% (Uditsky & Hughson, 2012).

In Australia, there are two inclusive programs for students with intellectual disability in universities: 'Up the Hill project' at Flinders University and the 'Uni 2 beyond' project at University of Sydney.

1. AUSTRALIA: UNI 2 BEYOND

The 'Uni 2 beyond' program at University of Sydney, established in 2012, enables students with intellectual disabilities to take one to two units of study with no assessment. The program is based on evidence that:

A successful university experience can be measured in many ways apart from grades, including increased learning, independence, self-determination, and positive social experiences (Centre for Disability Studies, 2016).

Students are paired with peer mentors and have access to one to one tutoring as well as facilitated social inclusion supports to engage in campus activities and internship opportunities (Centre for Disability Studies, n.d.).

2. AUSTRALIA: UP THE HILL

The Flinders University (n.d.) 'Up the Hill' program has been running since 1999 and operates using a similar model where students with disability select areas of study to attend but are not assessed. A certificate of recognition is awarded on completion of six academic semesters (3 years) as part of standard graduation ceremonies. Participating students have ranged in age from 19-66 years.

Evidence piece 9:

The value of work-based learning for people with intellectual disability

What is work-based learning and does it have results?

Work-based learning is a combination of two proven strategies for increasing employment of people with disability: Work experience and vocational training. Essentially it is:

placement [in a job or work experience] accompanied with supported training in a real world context (Wakeford & Waugh, 2014, p. 18).

Work-based learning has been shown to have results for people with intellectual disability who learn well in situ (Crawford, 2011; Wehman et al., 2018; Lewis et al., 2011a), given that, for people with intellectual disability:

transfer of training from one setting (e.g., classroom) to another setting (e.g., workplace) is a particular impediment because of difficulties in generalisation of skills (Lewis et al., 2011a. p. 108).

Various researchers have argued that work-based learning, or 'place then train', is preferable to, and more successful than, the 'train then place' model, which is based on the idea that job seekers have to slowly acquire skills through a sequence of preparatory then vocational courses and prove their work 'readiness' (Cocks & Thorensen, 2013). As argued by some researchers, the work-based training model (or place then train)

is particularly useful for those with autism and intellectual disability where generic skills development is not easily transferred from the classroom and into the workplace. Many young people with intellectual disability can struggle with classroom-based vocational training, and learn better through practical, hands-on experience. With this in mind, resources can be better utilised by training the person in the specific role, for a specific employer and on-the-job; rather than spending years 'waiting' for someone to becoming 'work ready' (Wakeford & Waugh, 2014, p. 18).

An Australian study has found that people with disability who undertook part or all of an apprenticeship or traineeship experienced higher levels of employment, wages and job durability

than a similar cohort of people with disability who did not commence traineeships or apprenticeships but started a first job (Lewis et al., 2011a).

It is not only vocational skills that are able to be built using a place-then-train approach. Evidence from school to work transition programs has also shown that the opportunity to engage in direct, hands on, work placement experience while in secondary school also builds a range of work-related, non vocational skills, or 'soft skills', such as greeting co-workers and workplace communication, that are a factor in gaining open employment and to being successful once in the workplace (Wehman et al., 2018).

Ingredients to support work-based training

A small set of Australian research has identified a range of ingredients that support successful work-based training models. Ingredients include:

- Provide “sufficient and appropriate support to adjust the inhibiting structures in the physical and social environment”
- Form “partnerships with disability employment services, which specialise in providing on-the-job support for workers with disabilities”
- Form partnerships with “group training organisations, which specialise in employing apprentices and trainees through host employers” (Cocks & Thorensen, 2013, p. 12).

The most significant ingredient to success has been identified as:

supportive and understanding individuals or agencies willing to provide flexible, individualised support tailored to the individuals’ needs... [such as] emotional and practical support ...[in] training and workplace environments. Support came from friends and family, supervisors and co-workers, disability employment services, group training organisations and other employers/host employers, TAFE or other registered training organisations and disability liaison officers in TAFE or other organisations, assessors and trainers (Cocks & Thorensen, 2013, p. 12).

Common work-based training models

1. SCHOOL TO WORK TRANSITION PROGRAMS

b) Australian School Based Apprenticeship and Traineeship (known as SBAT, ASbAT or ASBA) ASbATs enable young people to undertake part time paid employment and training in an apprenticeship or traineeship while they are still in secondary school (usually years 11 and 12). There is evidence to suggest that people with disability complete apprenticeships and traineeships at only slightly lower rates than their peers without disability (Ball & John, 2005; Lewis et al., 2011a), though it should be noted that completion rates overall are not good (Cocks & Thorensen, 2013).

Apprenticeships and traineeships have been shown to be beneficial pathways for people with disabilities, particularly for people with intellectual and learning disabilities (Lewis et al., 2011a,

2011b) for obtaining qualifications and employment as they combine training and education with practical work (Cocks & Thorensen, 2013, p. 7).

c) Ticket to Work

Ticket to Work is a national program of the National Disability Services, Australia, that supports networks of partners in local regions who work to provide opportunities for young people with disability to build employability while they are at school (mainstream or special schools) (ARTD Consultants, 2019). Partners include schools, Disability Employment Services, TAFE/RTOs, employers, disability services and others, who

work together to provide young people with access to career development, workplace preparation, work experience, vocational skills and Australian School Based Apprenticeships and Traineeships (ASbATs). Essentially each Local Network supports young people with disability to participate in the same 'typical' transition to employment activities that their non-disabled peers generally partake in (Wakeford & Waugh, 2014, p. 6).

Ticket to Work includes a range of career and employment development activities conducted in school:

- Vocational Education and Training at secondary school
- Australian School based Apprenticeships and Traineeships (ASbAT)
- Work experience/placement
- Career development through customised employment techniques
- After school work
- Self-employment during secondary school (microbusiness) (ARTD Consultants, 2019, p. 8).

Ticket to Work participants (around 53% of those being young people with intellectual disability) have been supported to undertake the majority of their vocational training 'on the job' as much as possible "demonstrating competency by actually undertaking tasks in the workplace setting" which leads to better employment outcomes for young people with intellectual disability (Wakeford & Waugh, 2014, p. 23).

Two evaluations of Ticket to Work have evidenced that it is a successful model, with participants being more likely to be employed (64%) than the comparison group (33%), as well as be more likely to complete year 12, undertake post-secondary education, be more socially active and more independent (ARTD Consultants, 2019).

2. INTERNSHIPS

Internship models that provide specialised support and skill development for people with intellectual disability have been shown to lead to open employment (Wehman et al., 2018). There are several internship models in Australia, that have evidenced outcomes for people with intellectual disability. Some are described below.

a) Project SEARCH

The Project SEARCH Transition-to-Work Program originated in the United States with a primary target of assisting young people with intellectual disability. It is a "business-led, one-year employment preparation program that takes place entirely at the workplace" (Project SEARCH, n.d.) combining classroom-based training (onsite in the workplace), career exploration, and a range of

work experience through worksite rotations. In the original model in the US, students in the last year of secondary school rotate through three different internships of 10-12 weeks each. The focus is on intensive on-the-job training supplemented by classroom learning (Wehman et al., 2018). Project SEARCH has been widely evaluated and achieves on average employment rates of 83% (Christensen & Richardson, 2017). The model has been extended to multiple countries including the UK, where it is part of a “supported internship” approach. These programs are “based mainly on employers' premises, with some time in college or a classroom in the workplace. Support throughout the study programme is provided to both the young person and the employer through a Job Coach” (Preparing for Adulthood, n.d.). Project SEARCH or ‘supported internships’ for young people with intellectual disability have been running in the UK for approximately 8 years with significant employment results (Brine & Kiernan, n.d.).

b) The Integrated Practical Placement (IPP) program

A similar program, adapting the Project Search model, has been run in Australia. The Integrated Practical Placement (IPP) program has been run twice by the Royal Children’s Hospital Melbourne and Holmesglen (TAFE) in 2018 and 2019 for 10-12 students with ‘learning disability’ undertaking Certificate 1 in Work Education (WISE Employment, n.d.). Students completed three nine-week placements within the hospital during the year including in the areas of human resources, medical records, allied health, volunteer and family services, the early learning centre, kitchen, mailroom and equipment departments (Holmesglen, n.d.). An independent evaluation found that 80% of students of IPP attained paid employment or paid traineeships compared to 35% who completed the Certificate in the usual TAFE setting without being part of the IPP program. IPP participants also experienced other outcomes such as increased confidence, independence and maturity (White et al., 2019). Recommendations of the evaluation suggest that this ‘gold standard’ program is suited to large scale employers of 3000 or more which afford a variety of placement opportunities for students (White et al., 2019).

Evidence piece 10:

Work experience as a predictor of employment for people with intellectual disability

What is work experience?

Work experience can be any direct exposure to the world of work. Young people often associate it with the structured 1-2 weeks of placement in a work environment that typically occurs in Australia as part of the year 9 or 10 curriculum in secondary schools.

However, work experience includes a wide range of things such as:

- job tours and visits to workplaces
- job shadow days
- short or ongoing work experience placements
- internships
- volunteering
- casual, part time or full-time work.

Work experience can be paid or unpaid.

What are the outcomes of work experience?

Work experience is a major way that individuals, including people with intellectual disability, learn about the world of work and build relevant skills and confidence. Internationally, work experience while in secondary school, or post-secondary education, has consistently been found to be a predictor of post-secondary employment for students with disability (Test et al., 2009; Wehman et al., 2014; Wehman et al., 2018). Australian research also shows that:

young people with disability benefit from frequent and continuous exposure to real work environments throughout the secondary school years and beyond (Wakeford & Waugh, 2014, p. 8).

Work experience in general, and especially during school years, is a strong predictor of later employment for people with intellectual disability (Molfenter et al., 2017; Petcu et al., 2015; Scheef et al., 2018; Wehman et al., 2018; Joshi et al., 2012; Southward & Kyzar, 2017). A number of studies found that paid work experience, while attending secondary school, more than doubles post-secondary open employment outcomes for people with intellectual disabilities (Southward & Kyzar, 2017).

Evidence from overseas and Australia indicates that connecting a young person with the world of work *before* they leave school greatly improves their chances of securing ongoing employment. ... most people with intellectual disabilities who are currently employed, had their first job before turning 21, indicating that early intervention and school to work support are key (ARTD Consultants, 2019, p. 4).

... the most consistent predictors of post school employment success has [sic] been community-based work experience while young people are still in high school, particularly paid jobs - where students are integrated into authentic workplaces alongside co-workers without disabilities (Luecking, 2009, quoted in Wakeford & Waugh, 2014, p. 8).

Having a paid working experience prior to exiting high school is the number one predictor for youth with intellectual disabilities pursuing CIE [competitive integrated employment] after graduation (Wehman et al., 2018. p. 140).

One American study (Joshi et al., 2012) found that work experience, as a major predictor of post school employment, also applied to young people with mild intellectual disability who were students in special education settings. These students “were 5.704 times as likely to ever engage in employment after school if they engaged in paid-employment experiences while in school” (Joshi et al., 2012, p. 104).

Work experience has many benefits for people with intellectual disability. It:

- 1) Supports the learning of people with intellectual disability about what they can do and builds confidence;
- 2) Enables families and other supporters (such as teachers and job coaches) to see what is possible for the person;
- 3) Is a good way to gather information about a person that can be used to build their Vocational Profile;
- 4) Is a safe way for potential employers to be introduced to a person with intellectual disability (Crosbie et al., 2019, p. 38).

Work experience is also valuable for older people with intellectual disability, even after they have left school. One Australian study of people with intellectual disability found that work experience was the most common preparatory activity that led to employment for the older adults they

interviewed. Work experience was found to provide connections and experience that resulted in future work, frequently with the same employer who had offered work experience (Meltzer et al., 2016). The research included multiple case studies of mature aged people with intellectual disability and the outcomes of their work experience, for example:

I started work experience here and then I started working here (25-year-old man, regional, working in a social enterprise plant nursery).

That's when I came here for work experience. After that I got the job (34-year-old woman, regional, working in a social enterprise plant nursery) (Meltzer et al., 2016, p. 20).

In a study of students with intellectual disability attending post-secondary education in the US (in Universities and colleges), students identified that paid on-the-job training was “one of the most important aspects of vocational training that allows them to be much better prepared for attaining successful post-graduation employment” (Petcu et al., 2015, p. 367).

The problem

However, in general, there are fewer opportunities available for people with disability to gain work experience (Wakeford & Waugh, 2014). People with disability often miss out on early opportunities to gain paid or unpaid work experience, for example, when they are at school (ARTD Consultants, 2019; Carter et al., 2017; Honey et al., 2014; Luecking & Luecking, 2006), and many people with intellectual disability have had little or no work experience by the time they finish school (ARTD Consultants, 2019; Brown et al., 2018). One Queensland study of students with intellectual disability found that nearly one third of students had not received work experience whilst in school (Davies & Beamish, 2009).

Lack of access to work experience for people with intellectual disability is particularly critical. Given that many people with intellectual disability learn well while ‘doing’ or in situ (Crawford, 2011), lack of access to work experience means they lack opportunities to learn skills relevant to work, and to build their knowledge of workplaces and of their own interests (ARTD Consultants, 2019; Lee et al., 2019).

What works as a solution?

1. Get work experience *early*, before leaving secondary school (Molfenter et al., 2017; Wakeford & Waugh, 2014).
2. Regardless of age or stage of life, explore a wide range of work experience options.
3. Expand work experience opportunities by getting tailored support. Support can include:
 - a. Discovery and Vocational Profiling. This is a “person-centered exploration of an individual’s strengths, preferences, interests, and needs” (Wehman et al., 2018, p. 134). This might involve vocational assessments as well as discussions with the

person, their family and friends. It is a standard feature of the customised employment approach (Wehman et al., 2018).

- b. The provision of onsite supports to maximise opportunities for success (for example, on-site training, job coaching, customisation of job tasks, personal care support, travel training, assistive technology etc.) (Petcu et al., 2015; Scheef, 2019).
 - c. Programs that incorporate work experience into the final years of school, vocational training or tertiary education. These models show positive employment outcomes for participants (ARTD Consultants, 2019; Lee et al., 2019; White et al., 2019; Wakeford & Waugh, 2014; Molfenter et al., 2017; Petcu et al., 2015). For example: Ticket to Work (Wakeford & Waugh, 2014), and the Integrated Practical Placement Program (IPP) (White et al., 2019).
4. Utilise social networks to unearth opportunities for work experience. Social capital (that is, the personal and professional networks) of those in the job-seeker's life) is a critical component of success in fostering employment. Many people with intellectual disability rely on the social networks of family and friends to link to employment opportunities (Southward & Kyzar, 2017; Meltzer et al., 2016; Inge et al., 2018). Work-related circles of support have been used to generate possible work experience opportunities for people with intellectual disability (Burke & Ball, n.d.; Spagnolo et al., 2017).
 5. Build relationships with employers through negotiation around mutually beneficial job roles, seeking feedback, engaging employers into the school or post-secondary education program, utilising existing employer networks, provide training to employers about how to work with people with disability (Scheef, 2019).
 6. Utilise a range of funding sources (for example, from the school, from individualised funding) to 'braid' funding together to support early work experiences (Molfenter et al., 2017).

Evidence piece 11:

Individual placement and support (IPS) for people with intellectual disability

What is Individual placement and support (IPS)

Individual Placement and Support (IPS) is a variant of the model of supported employment that has evolved since the 1980s. Unlike Customised Employment, it has a focus on rapid movement into employment, coupled with support to address personal barriers and the ongoing provision of support in the workplace (Lawlor & Perkins, 2009). IPS has been primarily and extensively used with people with serious mental illness e.g., schizophrenia spectrum disorder, bipolar, depression, and has assisted “people living with behavioral health conditions work at regular jobs of their choosing” (IPS Employment Centre, n.d.).

IPS is an evidence-based model of supported employment for people with serious mental illness (Becker et al., 2011; Mar-shall et al., 2014). The core principles of IPS include rapid job search, integration of mental health and employment services, attention to client preferences, and individualised job searches and supports ... IPS helps clients to obtain and maintain competitive jobs of their choice without long periods of assessment, training, or internships (McLaren et al., 2017, p. 366)

IPS has also been used successfully with a range of other groups including a small number of examples with people with intellectual disability (Bond, 2020).

IPS has a strong evidence base that has established the key ingredients needed to make it effective. These have been identified as the 8 Principles of IPS (IPS Employment Center, n.d.):

IPS is based on the following elements:

| Name | Description |
|-------------------------------|---|
| 1. Competitive employment | Jobs anyone can apply for, pay at least minimum wage/same pay as coworkers with similar duties, and have no artificial time limits imposed by the social service agency. |
| 2. Systematic job development | Employment specialists systematically visit employers, who are selected based on the job seeker's preferences, to learn about their business needs and hiring preferences. |
| 3. Rapid job search | IPS programs use a rapid job search approach to help job seekers obtain jobs rather than assessments, training, & counseling. The first face to face contact with the employer occurs within 30 days. |
| 4. Integrated services | IPS programs are integrated with mental health treatment teams. |
| 5. Benefits planning | Employment specialists help people obtain personalised, understandable, and accurate information about their ... government entitlements. |
| 6. Zero Exclusion | People are not excluded on the basis of readiness, diagnoses, symptoms, substance use history, psychiatric hospitalisations, homelessness, level of disability, or legal system involvement. |
| 7. Time un-limited supports | Job supports are individualised and continue for as long as each worker wants and needs the support. Employment Specialists have face to face contact at least monthly. |
| 8. Worker preferences | IPS program services are based on each job seeker's preferences and choices rather than the employment specialist's and supervisor's judgments. |

These principles have been tested and found to contribute to the overall effectiveness of IPS in supporting people to gain and maintain open employment (Lawlor & Perkins, 2009). For example, there is evidence to show that when 'worker preferences' are used to match the worker to the job, that increased employment outcomes and job retention occurs (Lawlor & Perkins, 2009). Interestingly, the element of 'rapid job search' has been shown to increase employment outcomes, when compared to an alternate strategy of pre-vocational training as a pathway to employment (for people with mental illness) (Lawlor & Perkins, 2009). Further, there is evidence that the provision of 'time un-limited support' is also linked to outcomes (Lawlor & Perkins, 2009).

Outcomes

The Individual Placement and Support (IPS) model has a strong evidence base for people with mental illness, achieving high quality outcomes (Becker et al., 2011; Bond et al., 2008; Smith et al., 2017). Twenty-seven randomised control trials have been conducted on IPS between 1996 and

2019, spanning multiple countries (most in the US and 3 in Australia) and over 6,000 people with mental illness, which show significant increased employment outcomes for IPS for this cohort over other interventions (Bond, 2020; Drake et al., 2019).

Outcomes have been evidenced in many studies and include:

- Increased earnings
- Increased job satisfaction
- More rapid employment placement (Bond, et al., 2012).

However, IPS has not been used extensively with people with intellectual disability, and there are few studies that attest to its outcomes for this cohort. In a study of 280 young people (16-24 years) with intellectual disability (55% of sample) or psychiatric disability in the US using IPS, researchers reported an average employment rate of 36% as a result of IPS (Noel et al., 2017). In a study of people with Autism Spectrum Disorder, the five participants experienced:

- Increased employment
- Increased earnings
- Increased hygiene
- Increased self-esteem
- Increased social and family relationships
- Increased self-confidence and independence (McLaren et al., 2017).

Key ingredients of success

The principles of IPS have been evidenced to be related to the outcomes of the program and a Fidelity model is available to guide practice, based on the 8 principles outlined above.

In addition, in one study involving a large number of young people with intellectual disability, recommendations were made to help overcome barriers to the success of IPS with this group. These include:

- “provide job coaching/training at the work site to overcome cognitive problems”
- “provide concurrent social skills training while preserving the IPS rapid job search”
- increasing “outreach to the youth and the youth’s family to prevent disengagement from IPS” (including in relation to low expectations of families related to young people with disability, and family’s concerns for the young person’s safety) (Noel et al., 2017, p. 357).

The IPS model relies on successfully identifying and providing support to overcome barriers to employment. The above study also found that 36% of young people with intellectual disability continued to experience problems with transportation after they found employment which also affected the success of IPS (Noel et al., 2017).

Evidence piece 12:

Customised employment for people with intellectual disability

What is customised employment?

Customised employment is part of a suite of approaches that provide supports to job seekers with disability, and has been particularly designed for people with significant disability (Wehman et al., 2018). Customised employment was developed in 2001 in the United States by the U.S. Department of Labor's Office of Disability Employment Policy and has been used widely in the US since then and extended to other parts of the world (Wehman et al., 2018).

Unlike traditional approaches to getting a job in the competitive labour market, it does not begin by focusing on job vacancies but focuses on what the person with disability has to offer the labour market (LEAD Center, 2015). Customised employment is targeted and pro-active and works with both the job seeker *and* the employer to **shape a job opportunity** and create a specific job description to match the requirements of both (Wehman et al., 2018; Citron et al., 2008). It involves:

a well-defined discovery process ... identifying the individual's strengths, interests, and preferences. The outcome of that process then drives the identification of employment opportunities where unique job descriptions are created that match both the employer's and employee's needs and interests (Wehman et al., 2018, p. 134)

Customised employment can include a range of strategies such as:

- | | |
|------------------|---|
| Job carving: | Crafting a job out of some elements or tasks of a job description, but not all. |
| Job negotiation: | Combining tasks from multiple job descriptions within a business into a new job description. |
| Job creation: | A new job description is created from unmet business needs identified during discussions with the employer (usually led by an employment specialist). |

Job sharing: Two or more people sharing the same job.

Self-employment: Creation and operation of a self-owned business (or microenterprise) with or without the help of paid (e.g., service agencies) or unpaid (e.g., family members) support. (Adapted from Wehman et al., 2018, p. 135, and Citron et al., 2008, p. 170).

Researchers from the United States explain that customised employment importantly focuses on delivering a 'win-win' for both employee and employer:

Customized employment opportunities by definition are successful because there is a specific match between the employer's needs and the strengths, preferences, interests, talents, and what works/doesn't work for the individual with a disability that the employer can, as part of his/her day-to-day business practices or with minimal reasonable accommodations, provide (Ouimette & Rammler 2017, p. 334).

Common ingredients include:

- The job-seeker's interests, preferences, and talents drive the employment development process, not the labour market;
- A negotiation of mutual benefit between the job-seeker and the employer;
- The provision of long-term workplace supports, such as workplace training and support, that are not time limited;
- Long-term supports are tailored to the needs of the person and to the employer to ensure ongoing employment is maintained (Inge et al., 2018; King & Waghorn, 2018; Luecking & Luecking, 2006; Riesen et al., 2015; Smith, McVilly, Rhodes, & Pavlidis, 2018; Szoc & Harvey, 2009; Wehman et al., 2018).

Customised employment is typically a lengthy process to build an understanding of the individual with disability and to build an appropriately matched job with an employer. Overall, the customised employment process is resource intensive. One US study found that the mean duration from commencement of the customised employment process (at step 1 Discovery) to job placement was 128 days (range = 11 to 374 days) (Luecking & Luecking, 2006), a time parameter broadly confirmed by other studies in the US context.

Steps in the customised employment process

The customised employment process relies on the support of a professional employment specialist who guides and resources the steps of the process.

Step 1: 'Discovery' process:

The Discovery process is a “person-centered exploration of an individual’s strengths, preferences, interests, and needs” (Wehman et al., 2018, p. 134). This might involve vocational assessments as well as discussions with the person, their family and friends (Wehman et al., 2018). The Discovery process:

guides job seekers through a process of finding out who they are, what they want to do, and what they have to offer ... [it] collects information about the job seeker’s interests, skills, environmental preferences, employment goals, and other topics related to the job seeker’s employment search, rather than outlining their deficits (LEAD Center, 2015, p. 5).

Smith, McVilly, McGillivray, and Chan (2018) highlight that the Discovery process also

identifies and highlights the existing social capital the client can draw upon to make their employment dream a reality, or identifies where such social capital needs to be built as a first step towards realising their ambitions (p. 71).

Smith, McVilly, McGillivray, and Chan (2018) argue that this focus on illuminating the social capital (information and networks) around the person with disability is a critical additional feature of the Discovery process that enables the link into employment by unlocking the supports and information that exist around the person.

The ‘Discovery’ process has been used since the mid 1980’s and so has significant practice resources available to support it. The Discovery process typically involves:

- *Meet, plan with and observe the job seeker over a period of time and in different locations/settings/environments.* Physically meeting with the person in familiar and unfamiliar environments enables observation of the person’s capacities in use and the resources available to them. The process involves attending to what are the person’s goals for employment and, because many people have not had the life experience to develop these, also attending to their likes and dislikes;
- *Interview family, friends and other acquaintances* to bring out interests and needs;
- *Synthesise observations about the job seeker at home and in the community;* most importantly through a discussion with the job seeker. Observation of the person in a range of settings, for example doing volunteer work, in leisure activities, at home, in day services or ADEs, in religious or cultural activities helps identify interests, particularly where a person is unable to verbalise these;
- *With the job seeker, identify his/her interests and the businesses in the community that are most strongly aligned with these interests.* This might include organising visits to potential

businesses to give the job seeker a concrete experience of the work environment and the type of work proposed. In addition, this step is likely to involve having ‘informational interviews’ (Inge et al., 2018) with employers to learn more about the types of jobs and the industry in order to help shape the thinking about the relevant task mix or the suitability of the match;

- *Identify the contributions the job seeker has to offer to a business.* This should include observing the job seeker actually undertaking work-related tasks either at home, in a different setting or as part of a set of short negotiated work experience opportunities that might focus on discrete aspects of a job, so as to build up a picture of what is the best match;
- *Identify the essential versus desirable conditions* that will help the job seeker thrive in an employment situation (Adapted from LEAD Center, 2015, p. 6; Inge et al., 2018).

The process typically takes between 20-60 hours, but averages 30 (Smith, McVilly, McGillivray, & Chan, 2018). The output of the Discovery process is a ‘vocational profile’ which describes the individual job seeker, their vocational area or theme, and “ideal working conditions for the individual” (Riesen et al., 2015, p. 187). The profile can include pictures of the job seeker performing tasks in a variety of settings (Brown, 2009). This profile is checked by the job seeker and their supporters (Inge et al., 2018; Brown, 2009). The profile is used as a basis for a customised planning meeting with the person and supporters (Brown, 2009). Finally, in some models, such as the Individualised Career Planning model (Brown, 2009), a ‘Representational Portfolio’ is produced which is designed to be used with prospective employers. The portfolio contains information about the customised employment approach, explaining the ‘win-win’ principle underpinning it, as well as information about the job-seeker “using pictures and text to graphically describe his interests, contributions, and successful support strategies, as well as the specific job tasks he can perform. These tasks become the building blocks of a customized job” (Brown, 2009, p. 99).

Step 2: Finding and negotiation with employer

Employers identified through the Discovery process as being a potential match for the job seeker are approached (Brown, 2009). Negotiation with a potential employer focuses on satisfying “an existing need through development of a new (and customized) role” (Wehman et al., 2018, p. 135). This includes working directly with the employer to:

- customise a job description based on current employer needs or on previously unidentified and unmet employer needs;
- develop a set of job duties
- develop a work schedule
- develop the job arrangement, along with specifics of supervision (including performance evaluation review),
- determine the job location (Riesen et al., 2015, p. 184).

Each position is ‘customised’ through a person-centred, rather than an employer-centred, lens which also seeks to identify how the job seeker can contribute to the business by meeting unmet needs. This involves a detailed process of discussion and negotiation, and uncovering of employer needs, not simply placement into existing positions (Inge et al., 2018).

Step 3: Customised supports

Identification of the customised supports needed occurs prior to job commencement. Customised supports and reasonable accommodations are provided in a non time-limited way (Griffin-Hammis Associates, n.d.). These can include informal supports (for example support with transport and independent living skills) as well as formal supports such job coaching, or personal care supports (Smith, McVilly, McGillivray, & Chan, 2018; Brown, 2009).

Step 4: Provision of on-the-job training

Customised supports also include on-the-job and formal training matched to the person's needs (Wehman et al., 2018).

Outcomes

Highly individualised approaches, such as customised employment, are designed to address and overcome the barriers that people with disability experience and that are created by the way work is structured (Becker et al., 2011; Bond et al., 2008; Condon & Callahan, 2008; Inge et al., 2018; Riesen et al., 2015; Smith et al., 2017; Szoc & Harvey, 2009). It is argued that:

Customized employment has the potential for minimizing competition with other job seekers without disabilities, since the outcome is a negotiated job description for a specific job seeker with a disability (Inge et al., 2018, p. 165).

There is an emerging evidence base showing that customised employment is successful (Wehman et al., 2018). A review of evidence by Riesen et al. (2015) identifies a range of projects that have used customised employment for significant numbers of people with intellectual disability to obtain (or create) employment in the open labour market, including through self employment. Inge et al. (2018) report that different projects have achieved between a 45-71% employment rate in open employment with high levels of job retention after 1 year. A study of young people with Autism Spectrum Disorder and intellectual disability in the US found that customised employment was similarly successful with this group. Importantly, researchers noted that of the jobs gained, the large majority required significant customisation to create job descriptions, reassign tasks and provide modifications (Wehman et al., 2016, cited in Inge et al., 2018). Research in the US has verified that customised employment has also been shown to:

- increase quality of life outcomes (Riesen et al., 2015)
- deliver wage increases (Riesen et al., 2015).

The individualised and customised approach has been noted to “have been successfully implemented with many ...youth and adults who had been labeled ‘too disabled to work’” (Brown, 2009, p. 101).

Evidence piece 13:

Work-focused circles of support for people with intellectual disability

Also known as Job Development Circles or Employment Circles of Support

What is a circle of support?

Circles of support are “small groups of individuals who agree to meet periodically with an individual with disabilities and help her/him secure that necessary for a decent quality of life” (Brown & Kessler, 2014, p. 91). Circles of support are guided by developing a vision of the desirable future around the focus person (Spagnolo et al., 2017). They can be comprised of family members, friends, neighbours, co-workers, people from community groups such as religious organisations, and sometimes staff from service providers (Spagnolo et al., 2017).

Circles of Support operate on principles of personal empowerment. These include: (1) involvement of invested and interested people, (2) focus on the individual’s preferences, talents and dreams, and (3) emphasis on personal strengths, not deficits (Spagnolo et al., 2017, p. 3).

How are circles of support been used to support employment?

Circles of support have also been used to support people with intellectual disability, mental illness or significant disability to seek or maintain employment.

Job development circles have been used in the US as a way to generate work opportunities by drawing on the social capital of people around the person with intellectual disability (Brown & Kessler, 2014). The person with intellectual disability generates a list of people they know who work

outside the home for money. This list is used as the basis for seeking support to make contacts into workplaces or for recruiting individuals to support certain tasks (such as supporting transport to work) to aid the jobseeker (Brown & Kessler, 2014).

In a different project in the US, circles of support have been used to support people with mental illness in supported employment settings (Spagnolo et al., 2017). This model is based on research that suggests that 'natural' supports (that is, people who are not in paid roles to support the person with a disability) are best placed to support a person with significant disability into employment and in the workplace. To support employment, a circle of support works with the person to determine their goals in relation to employment and utilises the support network to assist the person achieve this goal (Spagnolo et al., 2017).

In the UK there are example of circles of support being used in the workplace to support workers with intellectual disability. One guide to this suggests that circles of support in the workplace can assist with:

- Getting to know people
- Learning new skills
- Learning how to act
- Getting advice or problem-solving
- Keeping track of work tasks (Burke & Ball, n.d.).

In Australia, Employment circles of support (ECOS) have been used for people with intellectual disability or autism in one project in Victoria.

ECOS uses circles of support with the focus of assisting the person into paid employment. The person chooses the path they would like to take and their circle members. The circle meets regularly to discuss how they can assist the person to get a job, develop their skills and nurture their abilities (Bytschkow, 2016, p. 5).

In this model, the Employment circle of support is comprised of:

- the person with disability
- family members, friends and 'outside' supports (such as a teacher or coach)
- a mentor (that is "someone who makes a commitment to support the person to be job ready" including spending unpaid time in the workplace to support the person with disability learn their role)
- an employer ("who offers long term work experience with an aim of offering a paid job"), and
- a paid facilitator (Bytschkow, 2016, p. 6).

The circle meets regularly (6-8 weekly) and discusses the employment goals of the individual and strategies to achieve these. The focus person (person with a disability) is encouraged to chair the meetings.

The aim is to find long term work placement in accordance with the individuals' skills and interest, with employment as the outcome (Bytschkow, 2016, p. 7).

Circle members undertake various activities including approaching employers to seek a long term work placement or job, introducing the person to the employer, mentoring the person in the workplace, assisting them to learn skills, supporting transport to the workplace, among other things (Bytschkow, 2016).

The ECOS project was run in 2016 and involved 5 participants aged 14-21 with most still being at school. Most attended a work placement one day per week. Following 12 months, two were offered ongoing employment and others continued with education options (Bytschkow, 2016). No independent evaluation is available.

Evidence piece 14:

Mentoring to support transition and employment for people with intellectual disability

What is mentoring?

Mentorship relationships entail the provision of ongoing guidance, instruction, and encouragement to promote competence (Lindsay et al., 2016, p. 1330).

Other elements of a mentoring relationship include:

- It is reciprocal, though the main focus is on the growth and development of the mentee;
- It is dynamic: the relationship changes over time (Lindsay et al., 2016).

There are many types of mentoring including face to face activity, electronic mentoring, and peer mentoring models.

Peer mentoring is a type of mentoring where mentors are “individuals who share a common characteristic such as age, gender or identifying as a person with a disability” (Kramer et al. 2018, p. 118). Peer mentoring draws on learning from the mentor’s lived experience which is seen to be “unique from and complementary to formal instruction or support provided by professionals” (Kramer et al., 2018, p. 119).

Peer mentoring for transition-age youth with I/DD [intellectual and developmental disability] provides an opportunity for mentees to gain knowledge that supports successful transition to adulthood. For example, mentees with I/DD may benefit from peer mentors with I/DD who have experience setting and achieving goals, who know how to problem-solve barriers to inclusion and participation and who internalize a positive disability identity (Kramer et al., 2018, p. 119).

Electronic mentoring (e-mentoring) includes using email, online (e.g. video chat, synchronous typed messaging), and phone calls either as the main or sole form of communication or in tandem with some in-person activities (Kramer et al., 2018).

Mentoring related to transition from school to post school education and employment can take many forms, for example it can be undertaken in one-to-one or in group formats and be offered in many locations, including:

- School-based. This has included: being delivered by adults with disability in classroom settings; peer tutoring or peer mentoring.
- Community based, utilising trained mentors (sometimes peer mentors) involving groups or one-one mentoring face to face or via phone and online contact.
- Work based, using co-workers as mentors, or peers without disability as mentors (Kaehne & Bayer, 2013).
- Online, using peer mentors who connect with mentees via email and internet activities.
- Focused on families.
- Or have multiple elements of the above (Lindsay et al., 2016).

In mentoring programs focused on transition to work, mentors:

- Are role models
- Provide social and emotional support
- Provide motivation and encouragement
- Help mentees (young people with disability) to navigate services
- Support mentees to build social and self-advocacy skills
- Provide advice on work options and opportunities (Lindsay et al., 2016).

Outcomes of mentoring

Two large scale reviews of the research literature, one of 22 studies (Lindsay et al., 2016) and one of 40 studies (Lindsay & Munson, 2018), have reported on the evidence of a range of outcomes for youth with disability (under 25 years) related to mentoring programs. These reviews focused on mentoring programs supporting employment or transition to employment and post school education for people with disability (including intellectual disability), and found the following outcomes:

- increased self determination and empowerment
- increased decision making and problem solving
- increased social skills and independence
- increased knowledge related to transition to employment and post-school education
- increased academic and career development
- increased psychosocial health, quality of life and protective factors (Lindsay et al., 2016; Lindsay & Munson, 2018).

Overall, Lindsay et al. (2016) concluded that:

Consistent evidence suggests that effective mentorship interventions can also have benefits for youth with disabilities, in terms of job training, educational attainment, career supports, social skills, self-esteem, attendance, and work ethic (p. 1330).

Mentoring programs can also have outcomes for mentors, including educators and employers, in relation to increasing knowledge of a person's with disability's strengths and skills, and decreasing stigma and prejudice (Lindsay et al., 2016).

Key ingredients of success

A range of ingredients have been found to be associated with outcomes of mentoring:

- Programs with a duration of 6 months or more, enabling strong relationships between mentors and mentees (Lindsay et al., 2016);
- Structured programs with a planned curriculum rather than individualised (Lindsay et al., 2016);
- Paid coordinator responsible for mentor training, monitoring the implementation (Lindsay et al., 2016) and supervision of mentors (Kramer et al., 2018);
- Group based or mixed formats (Lindsay et al., 2016);
- Clear expectations for duration and frequency of contact (Kramer et al., 2018);
- Mentor characteristics that include: consistency, dependability, "interest in supporting a mentee, respect for the mentee's viewpoint and willingness to seek and utilize support from programme staff" (Kramer et al., 2018, p. 120);
- Alignment between mentor's experiences and goals of the mentoring program (Kramer et al., 2018);
- Provision of peer mentor training to build mentoring skills and clarity around mentor-mentee interactions;
- Mentees having choice over preferred communication technology (if using e-mentoring) (Kramer et al., 2018);
- Focus on both fostering the mentor-mentee relationship, as well as delivering the goals (content) of the program (Kramer et al., 2018).

Summarising the views of a number of researchers, Kramer et al. (2018) propose that peer mentoring has particular utility for people with intellectual disability.

Peer support and peer-mediated interventions are increasingly used as best practice for transition-age youth with developmental and intellectual disabilities (Kramer et al., 2018, p. 118)

In a peer mentoring program specifically designed for people with intellectual disability, researchers used two key features to support mentors with intellectual disability: a peer-mentoring script (including visual supports) and a peer mentor supporter/supervisor who provided real-time supervision and support during mentoring sessions, as well as time to practice before sessions and debrief after them. Customised employment supports were also provided for mentors with

intellectual disability. Overall, researchers found this approach to be successful but required high levels of resourcing (Kramer et al., 2018). To address this high resource impost, the researchers suggest:

Community-based organizations adopting electronic peer mentoring should consider partnerships with local colleges or vocational training institutions, as such partnerships could provide students with valuable hands-on experience and ensure organizations have access to highly qualified personnel to serve as supervisors (Kramer et al., 2018, p. 127).

Several researchers suggest that the use of electronic peer mentoring has potential to broaden the scope and availability of peer mentoring programs (Cassiani et al., 2020) especially where barriers exist to accessing in-person mentoring, such as lack of transportation or personal assistance, particularly for people with intellectual disability (Kramer et al., 2018).

Using a different model, researchers in the UK in the Youth Supported Employment Program (YSEP) matched peers without disability (from the same school) with mentees with intellectual disability while undertaking work experience placement. This model is also known as a peer-facilitated work placement. During the placement, the mentors travelled with the mentee from home to workplace, stayed at the workplace to provide advice and problem solving support, then travelled home with mentees. While outcomes were generally positive, there is insufficient evidence to confirm the positive effect of peer mentoring on these outcomes (Kaehne & Beyer, 2013).

Evidence piece 15:

Microenterprises and people with intellectual disability

What is microenterprise?

Microenterprises are a form of creating self-employment and are sometimes called small business enterprises (SBE) or micro-businesses. One definition is of businesses which employ 10 or fewer employees including the micro-entrepreneur, often rely on a very small amount of start-up costs (Conroy et al., 2010) and may or may not make enough money to support an individual (Reddington & Fitzsimons, 2013). A recent Australian study described microenterprises as:

a very small business that is simple to start, with minimal capital needed. They can have a vital purpose in improving people's quality of life and may give PwD a role in their local community providing a service or goods. They are highly individual - able to happen at a scale, stamina and schedule that suits an individual (Darcy et al., 2020, p. ii).

Microenterprises are emerging as an employment option for people with intellectual disability, including those who have high support needs. They are:

highly individualised, person-centred, and are built around the skills, strengths, and interests of the focal person. SBEs draw on a range of funding sources and paid and unpaid supports are instrumental in their development and continuation (Thoresen et al., 2018, p. 161).

A microenterprise can have a range of legal structures including "a simple corporation of any type, offering the possibility of holding assets in the corporation, rather than in the individual's name" (Conroy et al., 2010, p. 270) or can be owned and operated by a family member and then employ the individual with intellectual disability (Thoresen et al., 2018).

The benefits of self-employment for people with disability have been described as:

- including types of work not found in existing job opportunities
- offering a high degree of control and self-reliance which is attractive to some people

- offering a way to control how much personal income is drawn from a business and therefore manage the impact on government benefits and income support
- enabling the accumulation of assets (in a way not possible via income support)
- enabling control over the workplace and job tasks so that they match the needs of the individual
- offering capacity to schedule work around own needs
- potentially overcoming barriers to employment such as lack of transportation, workplace discrimination etc. (Hagner & Davies, 2002; Ouimette and Rammler, 2017; Ashley and Graf, 2018).

Microenterprises involving people with intellectual disability have some common ingredients including:

- **individualisation**, that is, “connected to genuine interests and talents of each individual” (Hagner & Davies, 2002, p. 73), and “designed around [the person]... his likes, strengths, and support needs...[and] underpinned by a clear vision for his life” (Thoresen et al., 2018, p. 167). As described by Reddington and Fitzsimons (2013) “the microenterprise should be wholly built around the person who is the ‘boss’, with outcomes that suit that person” (p. 125)
- generating some form of **income** for the individual or business
- the **business is genuine**: “offering a real service that is reliable and fulfils a specific need for the clients”, even if with high levels of support from others (Thoresen et al., 2018, p. 167; Bates, 2009)
- strong **leadership**
- **strength-based** approaches
- an emphasis on **social inclusion**
- some degree of **control by the person with intellectual disability** and/or their supporters. Some examples document the role of support workers in actively working to support this (Hagner & Davies, 2002)
- often supported by **individual funding arrangements**, such as the NDIS
- have a **range of supports** in place, “formal [i.e. disability and business supports] and informal [i.e. family and friends] ... [which are] flexible and creative in the way they function” (Thoresen et al., 2018, p. 167).

Microenterprises involving people with intellectual disability or those with high support needs have included a range of business focuses including:

- advocacy,
- public speaking,
- website development,
- software consultancy,
- pottery,
- artwork (McNaughton et al., 2006)
- personal services (e.g. household tasks including waiting for tradespeople)
- courier service
- making useable products from recycled paper and plastics

- production and sale of birdseed (Thoresen et al., 2018)
- gardening
- café
- car washing
- dance tuition
- administration (Reddington & Fitzsimons, 2013).

Microenterprises involving people with intellectual disability are predominantly developed by parents.

The substantial involvement of parents and other informal support in establishing and continuing SBEs [small business enterprises] exemplifies how SBE is different to self-employment. While the social and economic benefits of SBE and self-employment may be similar, the support structures vital to starting-up and continuing SBEs are distinctive (Thoresen et al., 2018, p. 170).

The rate of self-employment (entrepreneurship) among people with intellectual/cognitive disability in Australia is relatively high and estimated to be only 2.5% less than non-disabled Australians, though it is the lowest rate of entrepreneurship among Australians with disability (Darcy et al., 2020). As with overseas contexts, people with disability in Australia are, on average, 43% more likely to be self-employed than Australians without disability due to a range of factors including difficulty in gaining employment and lifestyle advantages of self-employment. It should be noted though that females with disability are far less likely to be entrepreneurs than males (Darcy et al., 2020).

Microenterprises involving people with intellectual disability are not well researched. However, there is a small amount of evidence that these microenterprises can operate in Australia and have some longevity (e.g. over 8 years) (Thoresen et al., 2018).

What are the outcomes and benefits of microenterprises?

A recent Australian study of micro-entrepreneurs with disability (including 10% with intellectual disability) found that outcomes included:

- sense of purpose,
- sense of future
- contributing to the community
- increased self-esteem
- increased quality of life
- larger social network
- having a job
- creating employment for others
- having a secure income (Darcy et al., 2020).

Likewise, one study of people with intellectual disability in the United States involved in microbusinesses found that outcomes included social and economic benefits and all participants had improved worklife quality, as did their support workers involved in supporting the enterprise activity

(Conroy et al., 2010). A small scale study of four people with intellectual disability in Australia found a similar range of outcomes including increased social connection and inclusion, increased sense of value, personal development, and additional income (Thoresen et al., 2018).

In a UK study of people with intellectual disability strong social outcomes were evident:

All entrepreneurs consulted had found the process very positive, gaining in confidence and ability, and engagement with the local community. Individuals spoke of being accepted as equal by others who did not have a learning disability – “The thing that we’re most proud of is the fact that we work on the market, we pay the market fee, we do exactly the same as every other trader, we have good weeks and bad weeks and everybody has to do that” (Reddington & Fitzsimons, 2013, p. 129).

A study of microentrepreneurs with intellectual disability in the UK found that a sense of success was not related to making a wage from the enterprise. In the enterprises studied, some generated enough income to pay a full wage, some made some contribution to a wage, while in others people were happy to ‘volunteer’ within their own organisation and not be paid a wage. “Typically, being busy and doing something worthwhile was perceived as more important than income” (Reddington & Fitzsimons, 2013, p. 128).

Ingredients of success

While there is not a great deal of research on what are the ingredients of success for developing and operating a microenterprise involving a person with intellectual disability, the following have been commented on in the literature:

- **Provision of support:** This includes support from family, friends, disability support organisations, as well as providers of business advice (Thoresen et al., 2018; Hagner & Davies, 2002; Reddington & Fitzsimons, 2013).

All individuals with learning disabilities required support to run their microenterprises. No microenterprises examined generated sufficient revenue to cover ongoing support costs, so external sources are required to meet support costs. Meeting on-going support costs was the major factor affecting sustainability (Reddington & Fitzsimons, 2013, p. 130).

In an Australian study, support from family and friends was seen as ‘integral’ with “many of the cultural, structural and attitudinal barriers experienced by PwD are overcome with support from immediate family, friends and carers” (Darcy et al., 2020, p. iii).

- **Financial planning and support:** including benefits planning and assistance in finding funding or other financial incentives (Hagner & Davies, 2002).
- **Alignment of individual’s skills and interests with a genuine community need:** “an ability to deliver a product or service needed to be based on a clear demand, either existing or created for that product or service” (Bates, 2009, p. 3).

Evidence piece 16:

The role of interagency collaboration as a factor in facilitating employment for people with intellectual disability

What is interagency collaboration?

Interagency collaboration is defined as:

key people from school personnel, family members, businesses, and human service agencies working together to promote successful post-school outcomes (Steere et al., 2007, as cited in Taylor et al., 2016, p. 163).

The problem

There is consistent reference in the research from multiple countries, and in Australia, to the problem of the complexity of the employment and education systems (e.g. ACIL Allen Consulting, 2017; Foley et al., 2013). This creates difficulties for people with disability, their families and also for service providers in navigating this complex landscape, for which there is “currently no guide” (ACIL Allen Consulting, 2017, p. 28). International research has highlighted concerns, echoed by Australian research (ACIL Allen Consulting, 2017), in regard to:

the difficulty students and their parents face navigating services across different programs during the transition to adult life, limited coordination across agencies, and a lack of information about the full range of service options available to young adults with disabilities (Hall et al., 2018, p. 209).

The solution

In response to these issues, calls for greater collaboration and coordination across programs and services have been consistently made by researchers in multiple countries (for example, Hall et al., 2018; Kohler & Field, 2003; Molfenter et al., 2017).

The principles for successful school to work transition (Kohler, 1996) highlight the importance of inter-agency collaboration as an underpinning to programs supporting transition to work or post-school education.

Interagency Collaboration practices ... facilitate involvement of community businesses, organisations, and agencies in transition education including interagency agreements that articulate roles, responsibilities, communications, and other strategies to foster collaboration and enhance curriculum and program development (Wakeford & Waugh, 2014, p. 22).

Kohler & Field (2003), US researchers in this field, document a number of research studies that confirm

that interagency collaboration and support for individual students in transition and their families is a factor so important that when done well, it facilitates achievement of transition goals, and when done poorly, it limits or impedes those goals (p. 178).

Similarly, a more recent US study confirms:

Interagency collaboration is well established as a predictor of employment outcomes during transition (Butterworth et al., 2017, p. 266).

Interagency collaboration can occur at several levels: 1. around a single school and its students, 2. on a broader local or regional basis, 3. at the level of State policies and programs (Butterworth et al., 2017).

Interagency collaboration can also be addressed on a wider basis than an individual school collaborating with individual businesses, post-school service and educational providers. Community transition teams consisting of secondary school transition personnel, post-school providers, employer groups, parents, chambers of commerce can identify common goals, address local transition issues and work together to solve the transition problems that exist in local communities (Meadows, 2012, as cited in Wakeford & Waugh, 2014, p. 26).

The key strategies used by collaborative partnerships include:

- provision of training,
- coordinated referral,
- co-location (i.e. employment/transition specialist placed in school),
- holding joint meetings between individual with disability, service providers, school and other stakeholders,
- creating inter-agency collaborative teams (to support transition activities and employment placement)
- creating and sharing resources and information for all stakeholders

- hosting a community transition committee to coordinate activity
- sharing funding (Taylor et al., 2016)
- cross pollinating ideas and brainstorming strategies to overcome barriers
- involving young people with disability as self-advocates (Molfenter et al., 2017).

Programs that work

Two successful Australian programs that are based on supporting this cross-sector coordination are the National Disability Coordination Officer (NDCO) Program and Ticket to Work.

1. NATIONAL DISABILITY COORDINATION OFFICER (NDCO) PROGRAM

The NDCO Program is a national program, run through 31 local networks, that aims to build linkages and information in local regions to support the transition of young people with disability from school to post-secondary education and employment (ACIL Allen Consulting, 2017).

The NDCO Program was introduced in response to difficulties faced by people with disability in navigating a complex system of fragmented, overlapping services across the disability, education and employment sectors. The program seeks to build links and coordinate services to reduce systemic barriers — including community attitudes — to participation in education and employment by people with disability (ACIL Allen Consulting, 2017, p. 16).

Both employment and participation in post-secondary education by young people with disability have increased in the majority of regions in which the NDCO Program is operating ((ACIL Allen Consulting, 2017).

The program has a primary focus on working with services (including schools, post-secondary education providers, and others) rather than working at a case management level with individuals with disability (though there remains flexibility to work directly with this group as well as families and carers). Key elements in the way the program is run include:

- *Impartiality* of information on education and employment options;
- *Local coordination and strategies* that “discourage organisations to work in silos”, reduce duplication in services, and encourage coordinated work to address service gaps and systemic change;
- *Networking and linkages* across sectors to improve service quality as well as increase the employment and training options available;
- *Ongoing awareness and training* about programs and best practice (ACIL Allen Consulting, 2017, p. 21).

2. TICKET TO WORK

Ticket to Work is a national program of the National Disability Services, Australia, that supports networks of partners in local regions to provide opportunities for young people with disability to build employability while they are at school (mainstream or special schools) (ARTD Consultants,

2019). Partners include schools, Disability Employment Services, TAFE/RTOs, employers, disability services and others, who

work together to provide young people with access to career development, workplace preparation, work experience, vocational skills and Australian School Based Apprenticeships and Traineeships (ASbATs). Essentially each Local Network supports young people with disability to participate in the same 'typical' transition to employment activities that their non-disabled peers generally partake in (Wakeford & Waugh, 2014, p. 6).

These networks bring together expertise from a range of sectors (education, industry, disability, employment, training, youth). Wakeford and Waugh (2014) suggest that the program

has evidence that partnerships comprised of schools, employers, employment services, disability agencies and youth services do create more pathways opportunities for young people collectively than they do if working individually or discretely (p. 26).

Two evaluations of Ticket to Work have evidenced that it is a successful transition model, with participants being more likely to be employed (64%) than the comparison group (33%), as well as be more likely to complete year 12, undertake post-secondary education, be more socially active and more independent (ARTD Consultants, 2019).

Evidence piece 17:

What are the outcomes of open employment for people with intellectual disability?

What is open employment?

Open employment is a term used in Australia. Autism Spectrum Australia define it as:

doing a job which can be done by any person. You do the same job as your co-workers and are paid the same wages (n.d.).

The Australian Government defines it as follows:

‘Open’ employment refers to employment where the jobs are open to all people, with or without disability. People with disability who wish to receive assistance to find employment in the open labour market can register with a DES provider (Department of Social Services, 2017, p. 8).

Other terms are used for this in different countries and contexts including ‘competitive employment’ or ‘competitive integrated employment’ (CIE). In CIE, “employers compensate their employees with ID at or above minimum wage and provide work opportunities within a body of co-workers who mostly consist of persons without a disability” (Blick et al., 2016, p. 359).

What are the benefits of having a job?

Many studies have provided evidence on life outcomes related to open employment experienced by people with intellectual disability. Outcomes of open employment that are widely evidenced in the research literature are:

- economic benefits (increased income and better standard of living)

- increased quality of life or wellbeing
- improved mental health
- improved physical health
- reduced risk of poverty
- increased social participation, including opportunities for friendships
- increased social support
- increased skill development
- increased sense of social worth, feeling valued and increased social status
- provision of purpose, structure and meaning to daily living (Holwerda et al., 2013; Honey et al., 2014; Blick et al., 2016; Simplican et al., 2014, Emerson et al., 2018; Carter et al., 2017; Meltzer et al., 2016; Riesen et al., 2015; Nevala et al., 2019).

Speaking about young people with intellectual disability in the USA, Carter et al. (2017) note:

... a good job contributes to a sense of accomplishment, self-worth, and independence; it gives young people a place to share their strengths and gifts in valued ways; it fosters new friendships and access to social supports; and it provides resources and connections that increase community involvement and contributions (p. 365).

In Australia, researchers reviewing the evidence on outcomes of employment for people with disability generally, note:

There is abundant evidence on the social and economic benefits of work for people with disability and their families. People who work contribute to society, gain financial independence, enjoy a better standard of living, experience improved physical and mental wellbeing, have expanded social networks and have opportunities to develop their career, demonstrate and expand their skills and knowledge (ARTD Consultants, 2016, p. 2).

People with intellectual disability in Australia have also been asked to report on the outcomes they get from employment, and report all of the outcomes listed above, including:

It's like everything had changed since – like when I was a kid I didn't know anything about [my Disability Employment Service] and about anything, but now I'm man ... It's like being a kid changing to be a man. It's like being changed a lot in a different life. It's really good for me ... now I'm a man. I have changed now. It feels really good now (23-year-old man, urban, working in open employment in fast food) (Meltzer et al., 2016, p. 40).

[I work] because I want to get out of my home, I want to do something ... I just wanted to do something and mix in with other people... Just to earn some money ... and just live (34-year-old woman, urban, working in an ADE) (Meltzer et al., 2016, p. 42).

Working is about, you get up, and you belong in the community, and get more confidence, like all the people at my job now treat me like the same, like equal (47-year-old woman, regional, working in open employment in a hotel) (Meltzer et al., 2016, p. 41).

Research suggests that having a job in young adulthood is linked to improved socioeconomic status 6-7 years later (Honey et al, 2014).

Interestingly, working even a small amount of hours per week can generate significant outcomes. A recent large-scale study of people with and without disability in the UK (16-65 year olds) found that working 8 hours a week “generates significant mental health and well-being benefits for previously unemployed or economically inactive individuals” (Kamerade et al., 2019, p. 1). This study found that people do not require full time employment to achieve these benefits.

While there is evidence that having a job leads to positive outcomes, there is also evidence that not having one leads to negative outcomes. There is strong evidence that a lack of employment greatly increases and contributes to the high relative poverty risk for people in Australia (Honey et al., 2014). The relationship between unemployment and poor health is also well established in the literature (Emerson et al., 2018; Kavanagh et al., 2013).

What are the benefits of having a job in open employment settings vs having a job in a segregated setting?

Many people with disability work in settings that are not open competitive employment. In Australia these include Australian Disability Enterprises and the term ‘supported employment’ is used in Australia to refer to this kind of work. (It should be noted that ‘supported employment’ has different meanings in different countries). The Australian government describes supported employment as follows:

‘Supported’ employment generally refers to employment in enterprises that have as their primary purpose employment of people with disability, and where the majority of employees have disability. There are often mixed industries within enterprises to cater for their employees, and there are higher levels of job customisation (Department of Social Services, 2017, p. 8).

Research has identified that outcomes from open employment compared to supported employment (i.e. sheltered or segregated) settings include:

- increased earnings
- increased quality of life
- increased opportunities for skill development.

A range of international research shows that people with intellectual disability can be successfully employed in competitive, integrated positions and substantially increase earnings in comparison to segregated work or day support programs (Butterworth et al., 2017; Migliore et al., 2012; Wehman et al., 2014 cited in Wehman et al., 2018). There is also some evidence that people with disability working in non-segregated settings achieve higher self-reported quality of life than those working in sheltered employment (Beyer et al., 2010). In addition, one Australian study of people with intellectual disability found that while there are skill development opportunities in both open employment and ADEs, those working in open employment had greater access to skill development opportunities in the mainstream community (Meltzer et al., 2016).

There is also evidence that people with intellectual disability prefer employment in non-segregated settings (Wehman et al., 2018) and that open employment and social enterprises are viewed as less segregated than ADE settings by Australians with intellectual disability (Meltzer et al., 2016). People with intellectual disability have reported that the main motivation for moving from an ADE to open employment was better pay, to work with people without disability and increased opportunities for social interaction (Meltzer et al., 2016).

While there is evidence that open employment leads to a wide range of outcomes for employees with disability, there is also evidence that some individuals prefer different settings including those of Australian Disability Enterprises. People with disability report that the relationships they form at work are the main factor that attaches them to their ADE and is the primary reason they want to stay (Meltzer et al., 2016). People with intellectual disability report enjoyment of 'sheltered workshop' settings with a range of fun activities and friendships that are more likely to extend beyond the workplace (Lysaght et al., 2017). Similarly, a proportion of young people with intellectual disability using Individualised Placement and Support became disengaged from this program due to concern over the loss of their social networks in sheltered employment settings (Noel et al., 2017). In addition, there is evidence that some people have had negative experiences in open employment and therefore prefer different settings (Simplican et al., 2014, citing Hall, 2009; Meltzer et al., 2016), though negative experiences are also reported in ADE settings (Meltzer et al., 2016). One Australian study of people with intellectual disability found that ADEs and social enterprises were felt to be more supportive of workers with intellectual disability and offer greater job stability than open employment (Meltzer et al., 2016). Finally, this study also identified that a small number of research participants employed in ADEs held more skilled and supervisory roles whereas those in open employment did not (Meltzer et al., 2016).

Moving from segregated to open employment

The problem

Employment in Australian Disability Enterprises (ADEs) is a common experience for Australian's with intellectual disability. People with intellectual disability who are National Disability Insurance Scheme (NDIS) participants are more likely to be employed in Australian Disability Enterprises (ADEs) than other participants of the NDIS. A large majority of NDIS participants with an intellectual disability who are aged 25 years and over and are employed, have employment in ADEs (70%), with 15% having a job in open employment on a full wage, and a further 13% having a job in open employment on a part wage (NDIA, 2019). Younger NDIS participants with intellectual disability (aged 15-24) are far more likely to be in open employment (on part or full wages) than employed by an ADE (NDIA, 2019, p. 35).

Segregated employment settings such as ADEs have traditionally not had good outcomes as a pathway to open employment, and were not initially designed for this purpose. Indeed, previously, the procedures governing Disability Employment Services (DES) prevented them from supporting

ADE employees to find work in open employment, though these have now been changed (Meltzer et al., 2016).

There is evidence that early placement of young people with intellectual disability into segregated day programs and sheltered employment options reduces their later economic participation (Cocks & Harvey, 2008). There is strong evidence that once in segregated employment settings, such as ADEs, few transition out into open employment. In 2014, less than 1% of those employed in an ADE transitioned to employment in the mainstream labour market (Department of Social Services, 2015; AFDO, 2018). Similarly, the National Disability Services suggests that less than 5% of people with disability transition to open employment from day services or supported employment settings in Australia (NDS, 2017).

Some studies have demonstrated that there are few structured skill development opportunities within sheltered and segregated employment settings and that time spent working in such settings does not promote later employment in open employment (Akkerman et al., 2016; Cimera et al., 2011; Dague, 2012; Hemphill & Kulik, 2017; Soeker et al., 2018). Similar issues have been found with day services or community access programs (Thoresen et al., 2018).

However, there is evidence that some people with intellectual disability have been supported via their ADE employers to transition into open employment (Meltzer et al., 2016). An Australian study found that ADEs did frequently offer opportunities for vocational training as part of employment, but that skill development opportunities in mainstream settings were more available in open employment (Meltzer et al., 2016).

The solution

A suite of research in the United States has highlighted the importance of a system-wide prioritisation of employment as a primary outcome for adults with intellectual disability, which then fosters a consistent set of expectations and supports across services, families and individuals (Hall et al., 2018).

Moving into open employment can occur from any location and is aided by a set of supportive practices (which research has also identified as being often present in social enterprises) (Smith, McVilly, McGillivray, & Chan, 2018). Ways to support people with intellectual disability to move out of segregated employment or day service settings and into open employment include:

- Focus on the vocational aspirations and the potential strengths of people with disability, based on what people with disability want (Smith, McVilly, McGillivray, & Chan, 2018; Soeker et al., 2018). This might utilise a Discovery approach that is an in-depth exploration of the interests and capabilities of the job seeker with disability. This process is based on building trust and getting to know job-seekers with intellectual disability (Hall et al., 2018).
- Provide opportunities to explore and move to, and between, higher skilled and better paid work (Smith, McVilly, McGillivray, & Chan, 2018).
- Provide opportunities to explore vocational options, including those that have a relatively higher social value/status than those commonly inherent in ADEs (Smith, McVilly,

McGillivray, & Chan, 2018). Expanding options can include looking for task and interest matches with employers, rather than waiting on job openings (Hall et al., 2018).

- Make available work tasks that foster skills development relevant to open employment (Soeker et al., 2018).
- Support development of relevant social skills including spending time planning for transportation to and from work (Hall et al., 2018).
- Plan the supports that will be needed in the workplace, such as communication and technology supports (Hall et al., 2018).
- Utilise individualised and tailored person centred approaches including Customised Employment practices, within ADEs and day services (Smith, McVilly, McGillivray, & Chan, 2018; Thoresen et al., 2018).
- Utilise opportunities in Social Enterprises to explore the vocational aspirations of people with intellectual disability. Components could include a range of entry level positions, job rotation options and opportunities for promotion and career paths (Smith, McVilly, McGillivray, & Chan, 2018).
- Support parents and families to gain knowledge of the employment service system, approaches that support employment, along with the influence of their own expectations and the value of their own social networks (Hall et al., 2018).

References

- ACIL Allen Consulting. (2017). *National disability coordination officer program evaluation*.
https://docs.education.gov.au/system/files/doc/other/ndco_evaluation_final_report.pdf
- Akkerman, A., Janssen, C. G. C., Kef, S., & Meininger, H. P. (2016). Job satisfaction of people with intellectual disabilities in integrated and sheltered employment: An exploration of the literature. *Journal of Policy and Practice in Intellectual Disabilities*, 13(3), 205-216.
<https://doi.org/10.1111/jppi.12168>
- Andersén, Å., Larsson, K., Pingel, R., Kristiansson, P., & Anderzén, I. (2018). The relationship between self-efficacy and transition to work or studies in young adults with disabilities. *Scandinavian Journal of Public Health*, 46(2), 272-278. <https://doi.org/10.1177/1403494817717556>
- Antonelli, K., Steverson, A., & O'Mally, J. (2018). College graduates with visual impairments: A report on seeking and finding employment. *Journal of Visual Impairment & Blindness*, 112(1), 33-45.
<https://doi.org/10.1177/0145482X1811200104>
- ARTD Consultants. (2016). *Ticket to work pilot outcomes study: A quasi-experimental analysis of pathways from school to economic and social inclusion. Report for National Disability Services*.
<https://tickettowork.org.au/media/uploads/2020/03/03/ticket-to-work-pilot-outcomes-study-2016.pdf>
- ARTD Consultants. (2019). *Ticket to work post school outcomes. Report for National Disability Services, final report*. <https://tickettowork.org.au/media/uploads/2020/03/03/ticket-to-work-post-school-outcomes-final-2019.pdf>
- Australian Bureau of Statistics. (2012). *Intellectual disability, Australia, 2012* (Cat. no. 4433.0.55.003).
<https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4433.0.55.003main+features452012>
- Australian Bureau of Statistics. (updated 2015). *Disability and labour force participation, 2012* (Cat. no. 4433.0.55.006). <https://www.abs.gov.au/ausstats/abs@.nsf/mf/4433.0.55.006>
- Australian Bureau of Statistics. (2019). *Schools Australia, 2018* (Cat. no. 4221.0).
<https://www.abs.gov.au/AUSSTATS/abs@.nsf/7d12b0f6763c78caca257061001cc588/027b82b2c1b54a59ca2579c700118e41!OpenDocument>
- Australian Federation of Disability Organisations. (2018). *AFDO – Position paper on the future of supported employment*. <https://engage.dss.gov.au/wp-content/uploads/2018/03/AFDO-Future-of-Supported-Employment-Paper-2018-03-FINAL.pdf>
- Australian Human Rights Commission. (2016). *Willing to work: National inquiry into employment discrimination against older Australians and Australians with disability*.
https://humanrights.gov.au/sites/default/files/document/publication/WTW_2016_Full_Report_AHRC_ac.pdf

- Australian Institute of Health and Welfare. (2008). *Disability in Australia: Intellectual disability* (Cat. no. AUS 110). <https://www.aihw.gov.au/getmedia/5a1b2a34-78bb-4696-a975-3121658a9505/bulletin67.pdf>
- Australian Institute of Health and Welfare. (2017a). *Disability in Australia: Changes over time in inclusion and participation in education* (Cat. no. DIS 69). <https://www.aihw.gov.au/getmedia/34f09557-0acf-4adf-837d-eada7b74d466/Education-20905.pdf.aspx>
- Australian Institute of Health and Welfare. (2017b). *Disability in Australia: Changes over time in inclusion and participation in employment* (Cat. no. DIS 68). <https://www.aihw.gov.au/getmedia/f732bc12-1787-4980-a226-303bc201d50a/Employment-20906.pdf>
- Australian Institute of Health and Welfare. (2019a). *People with disability in Australia* (Cat. no. DIS 72). <https://www.aihw.gov.au/reports/disability/people-with-disability-in-australia/education-and-skills/educational-attainment/highest-level-of-education>
- Australian Institute of Health and Welfare. (2019b). *Secondary education: School retention and completion*. <https://www.aihw.gov.au/reports/australias-welfare/secondary-education-school-retention-completion>
- Australian Trade and Investment Commission. (n.d.). *Australian Education System*. <https://www.studyinaustralia.gov.au/english/australian-education/education-system>
- Australian Trade and Investment Commission. (2016). *Australian education technology: Education of the future now*. <https://www.austrade.gov.au/edtech/australian-education-technology-report-2017.pdf>
- Autism Spectrum Australia. (n.d.). *Open employment*. <https://www.autismlaunchpad.org.au/work/open-employment/>
- Baer, R. M., Daviso, A. W., Flexer, R. W., Queen, R. M., & Meindl, R. S. (2011). Students with intellectual disabilities: Predictors of transition outcomes. *Career Development and Transition for Exceptional Individuals, 34*(3), 132-141. <https://doi.org/10.1177/0885728811399090>
- Ball, K., & John, D. (2005). *Apprentice and trainee completion rates*. National Centre for Vocational Education Research. <https://vital.voced.edu.au/vital/access/services/Download/ngv:2519/SOURCE2>
- Bates, K. (2009). *In business: Developing the self employment option for people with learning disabilities. Programme Report*. Foundation for People with Learning Disabilities. <https://files.eric.ed.gov/fulltext/ED542388.pdf>
- Beamish, W., Meadows, D., & Davies, M. D. (2012). Benchmarking teacher practice in Queensland transition programs for youth with intellectual disability and autism. *Journal of Special Education, 45*(4), 227-241. <https://doi.org/10.1177/0022466910366602>
- Becker, A., Flack, L., & Wickham, C. (2011). Programs that support employment for people with severe mental illness: A literature review. *International Journal of Psychosocial Rehabilitation, 16*(1), 52-58.

- Bellman, S., Burgstahler, S., & Ladner, R. (2014). Work-based learning experiences help students with disabilities transition to careers: A case study of University of Washington projects. *Work, 48*(3), 399-405. <https://doi.org/10.3233/wor-131780>
- Beyer, S., Brown, T., Akandi, R., & Rapley, M. (2010). A comparison of quality of life outcomes for people with intellectual disabilities in supported employment, day services and employment enterprises. *Journal of Applied Research in Intellectual Disabilities, 23*(3), 290-295. <https://doi.org/10.1111/j.1468-3148.2009.00534.x>
- Blacher, J. (2001). Transition to adulthood: Mental retardation, families, and culture. *American Journal on Mental Retardation, 106*(2), 173-188. [https://doi.org/10.1352/0895-8017\(2001\)106%3C0173:TTAMRF%3E2.0.CO;2](https://doi.org/10.1352/0895-8017(2001)106%3C0173:TTAMRF%3E2.0.CO;2)
- Blick, R. N., Litz, K. S., Thornhill, M. G., & Goreczny, A. J. (2016). Do inclusive work environments matter? Effects of community-integrated employment on quality of life for individuals with intellectual disabilities. *Research in Developmental Disabilities, 53-54*, 358-366. <https://doi.org/10.1016/j.ridd.2016.02.015>
- Blustein, C. L., Carter, E. W., & McMillan, E. D. (2016). The voices of parents: Post-high school expectations, priorities, and concerns for children with intellectual and developmental disabilities. *Journal of Special Education, 50*(3), 164-177. <https://doi.org/10.1177/0022466916641381>
- Bond, G. R., Drake, R. E., & Becker, D. R. (2008). An update on randomized controlled trials of evidence-based supported employment. *Psychiatric Rehabilitation Journal, 31*(4), 280-290. <https://doi.org/10.2975/31.4.2008.280.290>
- Bond, G. R., Drake, R. E., & Becker, D. R. (2012). Generalizability of the individual placement and support (IPS) model of supported employment outside the US. *World Psychiatry, 11*(1), 32-39. <https://doi.org/10.1016/j.wpsyc.2012.01.005>
- Bond, G. (2020). *Evidence for the effectiveness of individual placement and support model of supported employment* [PowerPoint slides]. IPS Works. <https://ipsworks.org/wp-content/uploads/2020/07/ips-evidence-5-29-20.pptx>
- Bouck, E. C. (2012). Secondary students with moderate/severe intellectual disability: Considerations of curriculum and post-school outcomes from the National Longitudinal Transition Study-2. *Journal of Intellectual Disability Research, 56*(12), 1175-1186. <https://doi.org/10.1111/j.1365-2788.2011.01517.x>
- Brine, A., & Kiernan, C. (n.d.). *Project SEARCH*. St George's University Hospitals NHS Foundation Trust. <https://www.stgeorges.nhs.uk/work-with-us/work-experience-at-st-georges-university-hospitals-nhs-foundation-trust/project-search/>
- Brown, K. (2009). Connecting youth and communities: Customized career planning for youth with psychiatric disabilities. *Journal of Sociology and Social Welfare, 36*(4), 93-110.
- Brown, L., & Kessler, K. (2014). Generating integrated work sites for individuals with significant intellectual disabilities. *Journal of Vocational Rehabilitation, 40*(2), 85-97. <https://doi.org/10.3233/JVR-140675>

- Brown, M., Harry, M., & Mahoney, K. (2018). "It's like two roles we're playing": Parent perspectives on navigating self-directed service programs with adult children with intellectual and/or developmental disabilities. *Journal of Policy and Practice in Intellectual Disabilities, 15*(4), 350-358. <https://doi.org/10.1111/jppi.12270>
- Burke, C., & Ball, K. (n.d.). *A guide to circles of support*. Foundation for People with Learning Disabilities. <https://www.mentalhealth.org.uk/sites/default/files/a-guide-to-circles-of-support.pdf>
- Butler, L. N., Sheppard-Jones, K., Whaley, B., Harrison, B., & Osness, M. (2016). Does participation in higher education make a difference in life outcomes for students with intellectual disability? *Journal of Vocational Rehabilitation, 44*(3), 295-298. <https://doi.org/10.3233/JVR-160804>
- Butterworth, J., Christensen, J., & Flippo, K. (2017). Partnerships in employment: Building strong coalitions to facilitate systems change for youth and young adults. *Journal of Vocational Rehabilitation, 47*(3), 265-276. <https://doi.org/10.3233/JVR-170901>
- Bytschkow, T. (2016). *Assisting people with disabilities into work. A workbook and guide to creating your own employment circles of support*. Disability Advocacy and Information Service. http://www.dais.org.au/uploads/dais/Employment_Circles_of_Support/ECOS%20Guide-Final%20Copy.pdf
- Carter, E. W., Austin, D., & Trainor, A. A. (2012). Predictors of postschool employment outcomes for young adults with severe disabilities. *Journal of Disability Policy Studies, 23*(1), 50-63. <https://doi.org/10.1177/1044207311414680>
- Carter, E. W., McMillan, E., & Willis, W. (2017). The TennesseeWorks partnership: Elevating employment outcomes for people with intellectual and developmental disabilities. *Journal of Vocational Rehabilitation, 47*(3), 365-378. <https://doi.org/10.3233/JVR-170909>
- Casey, L., Davies, P., Kalambouka, A., Nelson, N., & Boyle, B. (2006). The influence of schooling on the aspirations of young people with special educational needs. *British Educational Research Journal, 32*(2), 273-290. <https://doi.org/10.1080/01411920600569214>
- Cassiani, C., Stinson, J., & Lindsay, S. (2020). E-mentoring for youth with physical disabilities preparing for employment: A content analysis of support exchanged between participants of a mentored and non-mentored group. *Disability and Rehabilitation, 42*(14), 1963-1970. <https://doi.org/10.1080/09638288.2018.1543360>
- Cavanagh, J., Meacham, H., Pariona-Cabrera, P., & Bartram, T. (2019). Vocational learning for workers with intellectual disability: Interventions at two case study sites. *Journal of Vocational Education & Training, 71*(3), 350-367. <https://doi.org/10.1080/13636820.2019.1578819>
- Centre for Disability Studies. (n.d.). *uni 2 beyond*. <https://cds.org.au/uni-2-beyond/>
- Centre for Disability Studies. (2016). Providing a university experience for persons with intellectual disabilities. *Innovative Practices 2016 on Education and ICT*. <https://zeroproject.org/practice/australia-centre-for-disability-studies-cds/>

- Chambers, C. R., Hughes, C., & Carter, E. W. (2004). Parent and sibling perspectives on the transition to adulthood. *Education and Training in Developmental Disabilities, 39*(2), 79-94.
- Christensen, J. J., & Richardson, K. (2017). Project SEARCH workshop to work: Participant reflections on the journey through career discovery. *Journal of Vocational Rehabilitation, 46*(3), 341-54. <https://doi.org/10.3233/JVR-170871>
- Cimera, R. E. (2011). Does being in sheltered workshops improve the employment outcomes of supported employees with intellectual disabilities? *Journal of Vocational Rehabilitation, 35*(1), 21-27. <https://doi.org/10.3233/JVR-2011-0550>
- Cimera, R. E., Burgess, S., & Bedesem, P. L. (2014). Does providing transition services by age 14 produce better vocational outcomes for students with intellectual disability? *Research and Practice for Persons with Severe Disabilities, 39*(1), 47-54. <https://doi.org/10.1177/1540796914534633>
- Cimera, R. E., Wehman, P., West, M., & Burgess, S. (2011). Do sheltered workshops enhance employment outcomes for adults with autism spectrum disorder? *Autism, 16*(1), 87-94. <https://doi.org/10.1177/1362361311408129>
- Citron, T., Brooks-Lane, N., Crandell, D., Brady, K., Cooper, M., & Revell, G. (2008). A revolution in the employment process of individuals with disabilities: Customized employment as the catalyst for system change. *Journal of Vocational Rehabilitation, 28*(3), 169-179.
- Cocks, E., & Harvey, T. (2008). *Employment/day options interface research project. Final report.* School of Occupational Therapy and Social Work, Curtin University of Technology. https://espace.curtin.edu.au/bitstream/handle/20.500.11937/43977/135257_18935_Employment%20Day%20Options%20Final%20Report.pdf
- Cocks, E., & Thoresen, S. H. (2013). *Barriers and facilitators affecting course completions by apprentices and trainees with disabilities. Research report.* National Centre for Vocational Education Research. https://www.ncver.edu.au/__data/assets/file/0017/9332/barriers-and-facilitators-2597.pdf
- Cocks, E., Thoresen, S. H., & Lee, E. A. L. (2013). Employment and related economic outcomes for Australian apprenticeship and traineeship graduates with disabilities: Baseline findings from a national three-year longitudinal study. *Journal of Vocational Rehabilitation, 39*(3), 205-217. <https://doi.org/10.3233/JVR-130654>
- Condon, E., & Callahan, M. (2008). Individualized career planning for students with significant support needs utilizing the discovery and vocational profile process, cross-agency collaborative funding and social security work incentives. *Journal of Vocational Rehabilitation, 28*(2), 85-96.
- Conroy, J. W., Ferris, C. S., & Irvine, R. (2010). Microenterprise options for people with intellectual and developmental disabilities: An outcome evaluation. *Journal of Policy and Practice in Intellectual Disabilities, 7*(4), 269-277. <https://doi.org/10.1111/j.1741-1130.2010.00276.x>
- Crawford, C. (2011). The employment of people with intellectual disabilities in Canada: A statistical profile. Institute for Research and Development on Inclusion and Society (IRIS).

https://irisinstitute.files.wordpress.com/2012/01/intellectual-disability-and-employment_iris_cr.pdf

- Crosbie, J., Murfitt, K., Hayward, S., & Wilson, E. (2019). Literature review: Employment and economic participation of people with disability. NDIS Participant Employment Taskforce. Deakin University.
- Dague, B. (2012). Sheltered employment, sheltered lives: Family perspectives of conversion to community-based employment. *Journal of Vocational Rehabilitation*, 37(1), 1-11. <https://doi.org/10.3233/JVR-2012-0595>
- Darcy, S., Collins, J., & Stronach, M. (2020). *Australia's disability entrepreneurial ecosystem: Experiences of people with disability with microenterprises, self-employment and entrepreneurship*. UTS Business School, University of Technology Sydney. <https://www.uts.edu.au/sites/default/files/article/downloads/Australias%20Disability%20Entrepreneurial%20Ecosystem%20Report%201%20%28Accessible%29.pdf>
- Davies, M. D., & Beamish, W. (2009). Transitions from school for young adults with intellectual disability: Parental perspectives on "life as an adjustment". *Journal of Intellectual & Developmental Disability*, 34(3), 248-257. <https://doi.org/10.1080/13668250903103676>
- Department of Education and Training. (2015). *Evaluation of Disability Support Program. Final Report*. https://docs.education.gov.au/system/files/doc/other/dsp_evaluation_report_final.docx
- Department of Education, Skills and Employment. (2005). *Disability Standards for Education 2005 & guidance notes*. https://docs.education.gov.au/system/files/doc/other/disability_standards_for_education_2005_plus_guidance_notes_0.pdf
- Department of Social Services. (2015). *National disability employment framework - issues paper*. https://engage.dss.gov.au/wp-content/uploads/2015/05/issues_paper.pdf
- Department of Social Services. (2017). *Discussion paper: Ensuring a strong future for supported employment*. https://engage.dss.gov.au/wp-content/uploads/2017/12/discussion_paper_-_ensuring_a_strong_future_for_supported_employment.pdf
- Dessemontet, R. S., Bless, G., & Morin, D. (2012). Effects of inclusion on the academic achievement and adaptive behaviour of children with intellectual disabilities. *Journal of Intellectual Disability Research*, 56(6), 579-587. <https://doi.org/10.1111/j.1365-2788.2011.01497.x>
- Drake, R. E., Becker, D. R., & Bond, G. R. (2019). Introducing individual placement and support (IPS) supported employment in Japan. *Psychiatry and Clinical Neurosciences*, 73(2), 47-49. <https://doi.org/10.1111/pcn.12792>
- Emerson, E., Hatton, C., Baines, S., & Robertson, J. (2018). The association between employment status and health among British adults with and without intellectual impairments: Cross-sectional analyses of a cohort study. *BMC Public Health*, 18, Article 401. <https://doi.org/10.1186/s12889-018-5337-5>

- Fields, C. J., & Demchak, M. (2019). Integrated visual supports in a school-based microenterprise for students with intellectual disabilities. *Career Development and Transition for Exceptional Individuals*, 42(2), 128-134. <https://doi.org/10.1177/2165143418769611>
- Flinders University. (n.d.). *The Up the Hill Project*.
<https://www.flinders.edu.au/engage/community/clinics/up-the-hill-project>
- Foley, K.-R., Jacoby, P., Girdler, S., Bourke, J., Pikora, T., Lennox, N., Einfeld, S., Llewellyn, G., Parmenter, T.R., & Leonard, H. (2013). Functioning and post-school transition outcomes for young people with Down syndrome. *Child: Care, Health and Development*, 39(6), 789-800. <https://doi.org/10.1111/cch.12019>
- Francis, G., Gross, J. M. S., Turnbull, R., & Parent-Johnson, W. (2013). Evaluating the effectiveness of the family employment awareness training in Kansas: A pilot study. *Research and Practice for Persons with Severe Disabilities*, 38(1), 44-57. <https://doi.org/10.2511/027494813807046953>
- Francis, G. L., Stride, A., & Reed, S. (2018). Transition strategies and recommendations: Perspectives of parents of young adults with disabilities. *British Journal of Special Education*, 45(3), 277-301. <https://doi.org/10.1111/1467-8578.12232>
- Freeman, S. F. N., & Alkin, M. C. (2000). Academic and social attainments of children with mental retardation in general education and special education settings. *Remedial and Special Education*, 21(1), 3-26. <https://doi.org/10.1177/074193250002100102>
- Gilson, C. B., & Carter, E. W. (2016). Promoting social interactions and job independence for college students with autism or intellectual disability: A pilot study. *Journal of Autism and Developmental Disorders*, 46(11), 3583–3596. <https://doi.org/10.1007/s10803-016-2894-2>
- Gilson, C. B., Carter, E. W., Bumble, J. L., & McMillan, E. D. (2018). Family perspectives on integrated employment for adults with intellectual and developmental disabilities. *Research and Practice for Persons with Severe Disabilities*, 43(1), 20-37. <https://doi.org/10.1177/1540796917751134>
- Gomes-Machado, M. L., Heloisa Santos, F., Schoen, T., & Chiari, B. (2016). Effects of vocational training on a group of people with intellectual disabilities. *Journal of Policy and Practice in Intellectual Disabilities*, 13(1), 33-40. <https://doi.org/10.1111/jppi.12144>
- Griffin-Hammis Associates. (n.d.). Customized Employment. from
<http://www.griffinhammis.com/customizedemployment.html>
- Grigal, M., Hart, D., & Migliore, A. (2011). Comparing the transition planning, postsecondary education, and employment outcomes of students with intellectual and other disabilities. *Career Development and Transition for Exceptional Individuals*, 34(1), 4-17. <https://doi.org/10.1177/0885728811399091>
- Grigal, M., Hart, D., Papay, C., Smith, F., Domin, D., & Lazo, R. (2019). *Year four annual report of the TPSID model demonstration projects (2018-2019)*. Institute for Community Inclusion, University of Massachusetts Boston. <https://doi.org/10.13140/RG.2.2.11467.54567>

- Grigal, M., Hart, D., & Weir, C. (2012). A survey of postsecondary education programs for students with intellectual disabilities in the United States. *Journal of Policy and Practice in Intellectual Disabilities, 9*(4), 223-233. <https://doi.org/10.1111/jppi.12012>
- Hagner, D., & Davies, T. (2002). "Doing my own thing": Supported self-employment for individuals with cognitive disabilities. *Journal of Vocational Rehabilitation, 17*(2), 65-74.
- Hall, A. C., Butterworth, J., Winsor, J., Kramer, J., Nye-Lengerman, K., & Timmons, J. (2018). Building an evidence-based, holistic approach to advancing integrated employment. *Research and Practice for Persons with Severe Disabilities, 43*(3), 207-218. <https://doi.org/10.1177/1540796918787503>
- Hemphill, E., & Kulik, C. T. (2017). The tyranny of fit: Yet another barrier to mainstream employment for disabled people in sheltered employment. *Social Policy & Administration, 51*(7), 1119-1134. <https://doi.org/10.1111/spol.12220>
- Hetherington, S. A., Durant-Jones, L., Johnson, K., Nolan, K., Smith, E., Taylor-Brown, S., & Tuttle, J. (2010). The lived experiences of adolescents with disabilities and their parents in transition planning. *Focus on Autism and Other Developmental Disabilities, 25*(3), 163-172. <https://doi.org/10.1177/1088357610373760>
- Holmesglen. (n.d.). *Student job outcomes on the rise with The Royal Children's Hospital placement program*. <https://holmesglen.edu.au/About-Us/News/Student-job-outcomes-on-the-rise-with-The-Royal-Children-s-Hospital-placement-program/>
- Holwerda, A., van der Klink, J. J. L., de Boer, M. R., Groothoff, J. W., & Brouwer, S. (2013). Predictors of sustainable work participation of young adults with developmental disorders. *Research in Developmental Disabilities, 34*(9), 2753-2763. <https://doi.org/10.1016/j.ridd.2013.05.032>
- Honey, A., Kariuki, M., Emerson, E., & Llewellyn, G. (2014). Employment status transitions among young adults, with and without disability. *Australian Journal of Social Issues, 49*(2), 151-170. <https://doi.org/10.1002/j.1839-4655.2014.tb00306.x>
- Inge, K. J., Graham, C. W., Brooks-Lane, N., Wehman, P., & Griffin, C. (2018). Defining customized employment as an evidence-based practice: The results of a focus group study. *Journal of Vocational Rehabilitation, 48*(2), 155-166. <https://doi.org/10.3233/JVR-180928>
- IPS Employment Center. (n.d.). *What is IPS?* <https://ipsworks.org/index.php/what-is-ips/>
- Jackson, R. (2008). *Inclusion or segregation for children with an intellectual impairment: What does the research say?* Queensland Parents for People with a Disability. <https://www.ohchr.org/Documents/Issues/Disability/StudyEducation/NGOs/AustraliaNationalCouncilIntellectualDisability2.pdf>
- Joshi, G. S., Bouck, E. C., & Maeda, Y. (2012). Exploring employment preparation and postschool outcomes for students with mild intellectual disability. *Career Development and Transition for Exceptional Individuals, 35*(2), 97-107. <https://doi.org/10.1177/0885728811433822>
- Kaehne, A., & Beyer, S. (2013). Supported employment for young people with intellectual disabilities facilitated through peer support: A pilot study. *Journal of Intellectual Disabilities, 17*(3), 236-251. <https://doi.org/10.1177/1744629513495265>

- Kamerade, D., Wang, S., Burchell, B., Balderson, S. U., & Coutts, A. (2019). A shorter working week for everyone: How much paid work is needed for mental health and well-being? *Social Science & Medicine*, *241*, Article 112353.
<https://doi.org/10.1016/j.socscimed.2019.06.006>
- Kavanagh, A. M., Krnjacki, L., Beer, A., Lamontagne, A. D., & Bentley, R. (2013). Time trends in socio-economic inequalities for women and men with disabilities in Australia: Evidence of persisting inequalities. *International Journal for Equity in Health*, *12*(1), Article 73.
<https://doi.org/10.1186/1475-9276-12-73>
- King, J., & Waghorn, G. (2018). How higher performing employment specialists support job-seekers with psychiatric disabilities retain employment. *Journal of Rehabilitation*, *84*(2), 3-13.
- Kirby, A. V., Dell'Armo, K., & Persch, A. C. (2019). Differences in youth and parent postsecondary expectations for youth with disabilities. *Journal of Vocational Rehabilitation*, *51*(1), 77-86.
<https://doi.org/10.3233/JVR-191027>
- Kohler, P. D. (1996). *Taxonomy for transition programming: Linking research and practice*. Transition Research Institute, University of Illinois at Urbana-Champaign.
<https://files.eric.ed.gov/fulltext/ED399722.pdf>
- Kohler, P. D., & Field, S. (2003). Transition-focused education: Foundation for the future. *Journal of Special Education*, *37*(3), 174-183. <https://doi.org/10.1177/00224669030370030701>
- Kohler, P. D., Gothberg, J. E., Fowler, C., & Coyle, J. (2016). *Taxonomy for transition programming 2.0: A model for planning, organizing, and evaluating transition education, services, and programs*. Western Michigan University.
https://transitionta.org/system/files/resourcetrees/Taxonomy_for_Transition_Programming_v2_508_.pdf?
- Kramer, J. M., Ryan, C. T., Moore, R., & Schwartz, A. (2018). Feasibility of electronic peer mentoring for transition-age youth and young adults with intellectual and developmental disabilities: Project teens making environment and activity modifications. *Journal of Applied Research in Intellectual Disabilities*, *31*(1), e118-e129. <https://doi.org/10.1111/jar.12346>
- Lawlor, J., & Perkins, D. (2009). Integrated support to overcome severe employment barriers. Adapting the IPS approach. Centre for Public Policy, University of Melbourne and Brotherhood of St Laurence.
http://library.bsl.org.au/jspui/bitstream/1/1367/1/Lawlor%26Perkins_Integrated_support_employment_barriers.pdf
- LEAD Center. (2015). *Frequently asked questions: Using customized employment's discovery and group discovery models to promote job seeker success in American job centers*.
http://www.leadcenter.org/system/files/resource/downloadable_version/CE-and-Group-Discovery-FAQs.pdf
- Lee, E. A. L., Black, M. H., Tan, T., Falkmer, T., & Girdler, S. (2019). "I'm destined to ace this": Work experience placement during high school for individuals with autism spectrum disorder. *Journal of Autism and Developmental Disorders* volume, *49*(8), 3089-3101.
<https://doi.org/10.1007/s10803-019-04024-x>

- Leonard, H., Foley, K.-R., Pikora, T., Bourke, J., Wong, K., McPherson, L., Lennox, N., & Downs, J. (2016). Transition to adulthood for young people with intellectual disability: The experiences of their families. *European Child and Adolescent Psychiatry, 25*(12), 1369-1381. <https://doi.org/10.1007/s00787-016-0853-2>
- Lewis, G., Thoresen, S. H., & Cocks, E. (2011a). Post-course outcomes of apprenticeships and traineeships for people with disability in Western Australia. *Journal of Vocational Rehabilitation, 35*(2), 107-16. <https://doi.org/10.3233/JVR-2011-0558>
- Lewis, G., Thoresen, S. & Cocks, E. (2011b). Successful approaches to placing and supporting apprentices and trainees with disability in Australia. *Journal of Vocational Rehabilitation, 34*(3), 181-189.
- Lindsay, S., Hartman, L. R., & 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>
- Lindsay, S., McDougall, C., Menna-Dack, D., Sanford, R., & Adams, T. (2015). An ecological approach to understanding barriers to employment for youth with disabilities compared to their typically developing peers: Views of youth, employers, and job counselors. *Disability and Rehabilitation, 37*(8), 701-711. <https://doi.org/10.3109/09638288.2014.939775>
- Lindsay, S., & Munson, M. R. (2018). *Mentoring for youth with disabilities*. National Mentoring Resource Center. http://nationalmentoringresourcecenter.org/images/PDF/Mentoring_for_Youth_with_Disabilities_Population_Review.pdf
- Luecking, D. M., & Luecking, R. G. (2006). A descriptive study of customizing the employment process for job seekers with significant disabilities. *Journal of Applied Rehabilitation Counseling, 37*(4), 14-21. <https://doi.org/10.1891/0047-2220.37.4.14>
- Luecking, D. M., & Luecking, R. G. (2015). Translating research into a seamless transition model. *Career Development and Transition for Exceptional Individuals, 38*(1), 4-13. <https://doi.org/10.1177/2165143413508978>
- Lysaght, R., Petner-Arrey, J., Howell-Moneta, A., & Cobigo, V. (2017). Inclusion through work and productivity for persons with intellectual and developmental disabilities. *Journal of Applied Research in Intellectual Disabilities, 30*(5), 922-935. <https://doi.org/10.1111/jar.12284>
- Martinez, D. C., Conroy, J. W., & Cerreto, M. C. (2012). Parent involvement in the transition process of children with intellectual disabilities: The influence of inclusion on parent desires and expectations for postsecondary education. *Journal of Policy and Practice in Intellectual Disabilities, 9*(4), 279-288. <https://doi.org/10.1111/jppi.12000>
- McLaren, J., Lichtenstein, J. D., Lynch, D., Becker, D., & Drake, R. (2017). Individual placement and support for people with autism spectrum disorders: A pilot program. *Administration and Policy in Mental Health and Mental Health Services Research, 44*(3), 365-373. <https://doi.org/10.1007/s10488-017-0792-3>
- McNaughton, D. B., Symons, G., Light, J. C., & Parsons, A. (2006). "My dream was to pay taxes": The self-employment experiences of individuals who use augmentative and alternative communication. *Journal of Vocational Rehabilitation, 25*(3), 181-196.

- Meltzer, A., Bates, S., Robinson, S., Kayess, R., Fisher, K. R., & Katz, I. (2016). *What do people with intellectual disability think about their jobs and the support they receive at work? A comparative study of three employment support models: Final report*. Social Policy Research Centre, UNSW Australia.
https://www.arts.unsw.edu.au/sites/default/files/documents/Comparative_study_of_three_employment_models.pdf
- Midjo, T., & Aune, K. E. (2018). Identity constructions and transition to adulthood for young people with mild intellectual disabilities. *Journal of Intellectual Disabilities, 22*(1), 33-48.
<https://doi.org/10.1177/1744629516674066>
- Migliore, A., Timmons, J., Butterworth, J., & Lugas, J. (2012). Predictors of employment and postsecondary education of youth with autism. *Rehabilitation Counseling Bulletin, 55*(3), 176-184. <https://doi.org/10.1177/0034355212438943>
- Miller, S. C., Sax, C. L., & Tucker, M. S. (2019). Examining associations between postsecondary education, earnings, and provision of college and university training related to individuals with intellectual and developmental disabilities served by vocational rehabilitation. *Journal of Rehabilitation, 85*(1), 22-34.
- Molfenter, N. F., Hartman, E., Neugart, J., & Web, S. (2017). Let's get to work Wisconsin: Launching youth with intellectual and developmental disabilities into the workforce. *Journal of Vocational Rehabilitation, 47*(3), 379-390. <https://doi.org/10.3233/JVR-170910>
- Moore, E. J., & Schelling, A. (2015). Postsecondary inclusion for individuals with an intellectual disability and its effects on employment. *Journal of Intellectual Disabilities, 19*(2), 130-148.
<https://doi.org/10.1177/1744629514564448>
- Myhr, A., Haugan, T., Lillefjell, M., & Halvorsen, T. (2018). Non-completion of secondary education and early disability in Norway: Geographic patterns, individual and community risks. *BMC Public Health, 18*, Article 682. <https://doi.org/10.1186/s12889-018-5551-1>
- National Disability Insurance Agency. (2018). *NDIS participant outcomes*.
<https://data.ndis.gov.au/media/1901/download>
- National Disability Insurance Agency. (2019). *People with an intellectual disability in the NDIS*.
<https://data.ndis.gov.au/media/2126/download>
- National Disability Services. (2017). *Submission to the inquiry into career advice activities in Victorian schools*.
https://www.parliament.vic.gov.au/images/stories/committees/eejsc/Career_Advice_Activities/Submission_69_-_National_Disability_Services_15122017.pdf
- Nevala, N., Pehkonen, I., Teittinen, A., Vesala, H. T., Pörtfors, P., & Anttila, H. (2019). The effectiveness of rehabilitation interventions on the employment and functioning of people with intellectual disabilities: A systematic review. *Journal of Occupational Rehabilitation, 29*(4), 773-802. <https://doi.org/10.1007/s10926-019-09837-2>
- Next Step Team. (2018). *Next step 2018. Year 12 completers survey. Post-school destinations of Year 12 completers from 2017. Special school graduates*. Queensland Department of

- Education. <https://qed.qld.gov.au/det-publications/reports/earlyyears/Documents/ns-2018-special-schools.pdf>
- Nicholas, D. B., Mitchell, W., Dudley, C., Clarke, M., & Zulla, R. (2018). An ecosystem approach to employment and autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 48(1), 264-275. <https://doi.org/10.1007/s10803-017-3351-6>
- Noel, V. A., Oulvey, E., Drake, R. E., & Bond, G. R. (2017). Barriers to employment for transition-age youth with developmental and psychiatric disabilities. *Administration and Policy in Mental Health and Mental Health Services Research*, 44(3), 354-358. <https://doi.org/10.1007/s10488-016-0773-y>
- O'Brien, J., Bowman, P., Chesley, B., Hughson, E. A., & Uditsky, B. (2009). *Inclusive post-secondary education: Measuring quality and improving practice*. Government of Alberta
- Quimette, M., & Rammner, L. H. (2017). Entrepreneurship as a means to employment first: How can it work? *Journal of Vocational Rehabilitation*, 46(3), 333-339. <https://doi.org/10.3233/JVR-170870>
- Papay, C. K., & Bambara, L. M. (2014). Best practices in transition to adult life for youth with intellectual disabilities. *Career Development and Transition for Exceptional Individuals*, 37(3), 136-148. <https://doi.org/10.1177/2165143413486693>
- Petcu, S. D., Chezian, L. C., & Van Horn, M. L. (2015). Employment support services for students with intellectual and developmental disabilities attending postsecondary education programs. *Journal of Postsecondary Education and Disability*, 28(3), 359-374.
- Polidano, C., & Mavromaras, K. (2011). Participation in and completion of vocational education and training for people with a disability. *The Australian Economic Review*, 44(2), 137-152. <https://doi.org/10.1111/j.1467-8462.2011.00632.x>
- Potts, B. (2005). Disability and employment: Considering the importance of social capital. *Journal of Rehabilitation*, 71(3), 20-25.
- Preparing for Adulthood. (n.d.). *Project search - a model for supported internships*. <https://www.preparingforadulthood.org.uk/downloads/supported-internships/project-search-a-model-for-supported-internships.htm>
- Productivity Commission (2020a). *Report on government services 2020. Part B. Section 4: School education*. <https://www.pc.gov.au/research/ongoing/report-on-government-services/2020/child-care-education-and-training/school-education/rogs-2020-partb-section4.pdf>
- Productivity Commission (2020b). *Report on government services 2020. Part B. Section 5: Vocational education and training*. <https://www.pc.gov.au/research/ongoing/report-on-government-services/2020/child-care-education-and-training/vocational-education-and-training/rogs-2020-partb-section5.pdf>
- Project SEARCH. (n.d.). *Program*. <https://www.projectsearch.us/transition-to-work/>
- Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. Simon and Schuster.

- Rantatalo, O., Sjöberg, D., & Karp, S. (2019). Supporting roles in live simulations: How observers and confederates can facilitate learning. *Journal of Vocational Education and Training*, 71(3), 482-499. <https://doi.org/10.1080/13636820.2018.1522364>
- Reddington, T., & Fitzsimons, J. (2013). People with learning disabilities and microenterprise. *Tizard Learning Disability Review*, 18(3), 124-131. <https://doi.org/10.1108/TLDR-02-2013-0013>
- Redgrove, F. J., Jewell, P., & Ellison, C. (2016). Mind the gap between school and adulthood for people with intellectual disabilities. *Research and Practice in Intellectual and Developmental Disabilities*, 3(2), 182-190. <https://doi.org/10.1080/23297018.2016.1188671>
- Riesen, T., Morgan, R. L., & Griffin, C. (2015). Customized employment: A review of the literature. *Journal of Vocational Rehabilitation*, 43(3), 183-193. <https://doi.org/10.3233/JVR-150768>
- Rillotta, F., Arthur, J., Hutchinson, C., & Raghavendra, P. (2020). Inclusive university experience in Australia: Perspectives of students with intellectual disability and their mentors. *Journal of Intellectual Disabilities*, 24(1), 102-117. <https://doi.org/10.1177/1744629518769421>
- Ryan, J. B., Randall, K. N., Walters, E., & Morash-MacNeil, V. (2019). Employment and independent living outcomes of a mixed model post-secondary education program for young adults with intellectual disabilities. *Journal of Vocational Rehabilitation*, 50(1), 61-72. <https://doi.org/10.3233/JVR-180988>
- Scheef, A. R. (2019). What and who works: Strategies for facilitating work experience opportunities for students enrolled in postsecondary education programs. *Journal of Policy and Practice in Intellectual Disabilities*, 16(3), 223-231. <https://doi.org/10.1111/jppi.12285>
- Scheef, A. R., Barrio, B. L., Poppen, M. I., McMahon, D., & Miller, D. (2018). Exploring barriers for facilitating work experience opportunities for students with intellectual disabilities enrolled in postsecondary education programs. *Journal of Postsecondary Education and Disability*, 31(3), 209-224.
- Senate Standing Committee on Education and Employment. (2016). *Access to real learning: The impact of policy, funding and culture on students with disability*. https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Education_and_Employment/students_with_disability/~/media/Committees/eet_ctte/students_with_disability/report.pdf
- Sheppard, L., Harrington, R., & Howard, K. (2017). *Leaving School and Getting a Job. Research to Action Guide, A guide for young people with disability who want to work*. Centre for Applied Disability Research. <https://www.cadr.org.au/images/1811/schooltransitionemployment-fullguide.pdf>
- Simonsen, M. L., & Neubert, D. A. (2013). Transitioning youth with intellectual and other developmental disabilities: Predicting community employment outcomes. *Career Development and Transition for Exceptional Individuals*, 36(3), 188-198. <https://doi.org/10.1177/2165143412469399>

- Simplican, S. C., Leader, G., Kosciulek, J., & Leahy, M. (2014). Defining social inclusion of people with intellectual and developmental disabilities: An ecological model of social networks community participation. *Research in Developmental Disabilities, 38*, 18-29. <https://doi.org/10.1016/j.ridd.2014.10.008>
- Skellern, J., & Astbury, G. (2014). Gaining employment: The experience of students at a further education college for individuals with learning disabilities. *British Journal of Learning Disabilities, 42*(1), 58-65. <https://doi.org/10.1111/bld.12012>
- Smith, D. L., Atmatzidis, K., Capogreco, M., Lloyd-Randolfi, D., & Seman, V. (2017). Evidence-based interventions for increasing work participation for persons with various disabilities. *OTJR: Occupation, Participation and Health, 37*(2), 3S-13S. <https://doi.org/10.1177/1539449216681276>
- Smith, F. A., Grigal, M., & Sulewski, J. S. (2012). *The impact of postsecondary education on employment outcomes for transition-age youth with and without disabilities: A secondary analysis of american community survey data*. Institute for Community Inclusion, University of Massachusetts Boston. https://d86.hinsdale86.org/cms/lib/IL01904717/Centricity/Domain/157/Insight_15.pdf
- Smith, P., McVilly, K. R., McGillivray, J., & Chan, J. (2018). Developing open employment outcomes for people with an intellectual disability utilising a social enterprise framework. *Journal of Vocational Rehabilitation, 48*(1), 59-77. <https://doi.org/10.3233/JVR-170916>
- Smith, P., McVilly, K., Rhodes, P., & Pavlidis, L. (2018). *Customised Employment IWF Final Report*. Innovative Workforce Fund. <https://minerva-access.unimelb.edu.au/bitstream/handle/11343/241624/IWF%20Final%20Report%202018.pdf>
- Soeker, M. S., De Jongh, J. C., Diedericks, A., Matthys, K., Swart, N., & van der Pol, P. (2018). The experiences and perceptions of persons with disabilities regarding work skills development in sheltered and protective workshops. *Work, 59*(2), 303-314. <https://doi.org/10.3233/WOR-172674>
- Southward, J. D., & Kyzar, K. (2017). Predictors of competitive employment for students with intellectual and/or developmental disabilities. *Education and Training in Autism and Developmental Disabilities, 52*(1), 26-37.
- Spagnolo, A. B., Gill, K. J., Roberts, M. M., Lu, W., Murphy, A. A., Librera, L. A., & Dolce, J. (2017). *Instruction manual for facilitating circles of support for people with mental illnesses in supported employment settings*. Temple Collaborative on Community Inclusion. <http://tucollaborative.org/wp-content/uploads/2017/03/Instruction-Manual-for-Facilitating-Circles-of-Support-for-People-with-Mental-Illnesses-in-Supporting-Employment-Settings.pdf>
- State of Victoria, Department of Education and Training. (2015). *On track survey 2015: The destinations of school leavers in Victoria. Statewide report*. <https://www.education.vic.gov.au/Documents/about/research/OnTrack2015/2015%20On%20Track%20Statewide%20Report.docx>
- State of Victoria, Department of Education and Training. (2018). *Snapshot. On track 2018: Destinations of Victorian school leavers*.

- <https://www.education.vic.gov.au/Documents/about/research/OnTrack2018/snapshot-ontrack-2018.pdf>
- Szoc, R., Harvey, J. (2009). *Customized employment competency model*. ICF International.
<https://www.dol.gov/odep/pdf/2011cecm.pdf>
- Taylor, D. L., Morgan, R. L., & Callow-Heusser, C. A. (2016). A survey of vocational rehabilitation counselors and special education teachers on collaboration in transition planning. *Journal of Vocational Rehabilitation, 44*(2), 163-173. <https://doi.org/10.3233/JVR-150788>
- Test, D. W., Mazzotti, V. L., Mustian, A. L., Fowler, C. H., Kortering, L., & Kohler, P. (2009). Evidence-based secondary transition predictors for improving postschool outcomes for students with disabilities. *Career Development and Transition for Exceptional Individuals, 32*(3), 160-181. <https://doi.org/10.1177/0885728809346960>
- Thoma, C. A., Lakin, K. C., Carlson, D., Domzal, C., Austin, K., & Boyd, K. (2011). Participation in postsecondary education for students with intellectual disabilities: A review of the literature 2001–2010. *Journal of Postsecondary Education and Disability, 24*, 175–191.
- Thoresen, S. H., Thomson, A., Jackson, R., & Cocks, E. (2018). Meaningful social and economic inclusion through small business enterprise models of employment for adults with intellectual disability. *Journal of Vocational Rehabilitation, 49*(2), 161-172.
<https://doi.org/10.3233/JVR-180962>
- Uditsky, B., & Hughson, E. A. (2008). *Inclusive post-secondary education for adults with developmental disabilities: A promising path to an inclusive life*. Alberta Association for Community Living.
- Uditsky, B., & Hughson, E. A. (2012). Inclusive postsecondary education—an evidence-based moral imperative. *Journal of Policy and Practice in Intellectual Disabilities, 9*(4), 298-302.
<https://doi.org/10.1111/jppi.12005>
- United Nations, Division for Social Policy and Development Disability. (2006). *Convention on the Rights of Persons with Disabilities (CRPD)*.
<https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>
- Verdonschot, M. M. L., de Witte, L. P., Reichrath, E., Buntinx, W. H. E., & Curfs, L. M. G. (2009). Community participation of people with an intellectual disability: A review of empirical findings. *Journal of Intellectual Disability Research, 53*(4), 303-318. <https://doi.org/10.1111/j.1365-2788.2008.01144.x>
- Victorian Equal Opportunity and Human Rights Commission. (2012). *Held back: The experiences of students with disabilities in Victorian schools*.
https://www.humanrights.vic.gov.au/static/Resource-Held_back_report-2012-a6db183a9b13ac2dd426637e362d55eb.pdf
- Victorian Tertiary Admissions Centre. (n.d.). *Entrance requirements*.
<https://www.vtac.edu.au/who/entry-req.html#tertiary>
- Wakeford, M., & Waugh, F. (2010). *'Ticket to work': An employment and transition model for students with a disability*. Youth Disability Pathways Network (Inner Melbourne).

<https://web.archive.org/web/20200330123049/http://www.tickettowork.org.au/wp-content/uploads/2014/05/Ticket-to-Work-Scoping-Report-2010.pdf>

- Wakeford, M. & Waugh, F. (2014). *Transitions to employment of Australian young people with disability and the ticket to work initiative*. National Ticket to Work Network.
<https://tickettowork.org.au/resource/93/>
- Wehman, P. H., Schall, C. M., McDonough, J., Kregel, J., Brooke, V., Molinelli, A., Ham, W., Graham, C. W., Riehle, J. E., Collins, H.T., & Thiss, W. (2014). Competitive employment for youth with autism spectrum disorders: Early results from a randomized clinical trial. *Journal of Autism and Developmental Disorders*, 44(3), 487-500. <https://doi.org/10.1007/s10803-013-1892-x>
- Wehman, P., Taylor, J., Brooke, V., Avellone, L., Whittenburg, H. N., Ham, W., Brooke, A. M., & Carr, S. (2018). Toward competitive employment for persons with intellectual and developmental disabilities: What progress have we made and where do we need to go. *Research and Practice for Persons with Severe Disabilities*, 43(3), 131-144.
<https://doi.org/10.1177/1540796918777730>
- White, G., Kiegaldie, D., Hunter, S. (2019). *The integrated practical placement program: A program of social inclusion in the workplace for people with disability*. Holmesglen and the Royal Children's Hospital.
- WISE Employment. (n.d.). *Laura reaps benefits of The Integrated Practical Placement Program – a joint collaboration by The Royal Children's Hospital, Holmesglen Institute and WISE Employment*. <https://wiseemployment.com.au/success-stories/laura-reaps-benefits-of-the-integrated-practical-placement-program-a-joint-collaboration-with-the-royal-childrens-hospital-holmesglen-institute-and-wise-employment/>
- Wilson, N. J., Jaques, H., Johnson, A., & Brotherton, M. L. (2017). From social exclusion to supported inclusion: Adults with intellectual disability discuss their lived experience of a structured social group. *Journal of Applied Research in Intellectual Disabilities*, 30(5), 847-858. <https://doi.org/10.1111/jar.12275>
- Winn, S., & Hay, I. (2009). Transition from school for youths with a disability: Issues and challenges. *Disability & Society*, 24(1), 103-115. <https://doi.org/10.1080/09687590802535725>
- Zhang, Y., Haddad, E., Torres, B., & Chen, C. (2011). The reciprocal relationships among parents' expectations, adolescents' expectations, and adolescents' achievement: A two-wave longitudinal analysis of the NELS data. *Journal of Youth and Adolescence*, 40(4), 479-489.
<https://doi.org/10.1007/s10964-010-9568-8>