# RESEARCH TO ACTION

> Bridging the gap between what we know and what we do Effective school to employment transitions for young people with disability. A Rapid Review of the Literature







#### THE CENTRE FOR APPLIED DISABILITY RESEARCH

The Centre for Applied Disability Research (CADR) is an initiative of NDS. CADR aims to improve the wellbeing of people living with disability by gathering insights, building understanding and sharing knowledge. CADR's applied research agenda is helping to build the evidence base and support stakeholders to better understand what works, for whom, under what circumstances and at what cost.

#### **RESEARCH TO ACTION GUIDES**

Our objective is to build a comprehensive online collection of disability research and translational resources for the Australian context. Our Research to Action Guides are based on the best available local and international evidence and put together by subject matter experts to support research end users to engage with the evidence. We gather and analyse evidence about what works, and package that information into efficient and practical resources.

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### **ABOUT THIS GUIDE**

This Research to Action Guide articulates the key components of best practice for supporting the transition from school to employment for young adults with disability in Australia, based on the best available evidence. This suite of resources includes this rapid review of relevant literature and three practice guidance resources targeted at service users, service providers and disability employment practice leaders.

### FEEDBACK

Do you have feedback, or a suggestion for a Research to Action Guide? We welcome your thoughts and ideas. Please contact info@cadr.org.au.

## **EFFECTIVE SCHOOL TO EMPLOYMENT TRANSITIONS FOR YOUNG PEOPLE WITH DISABILITY. A RAPID REVIEW OF THE LITERATURE**

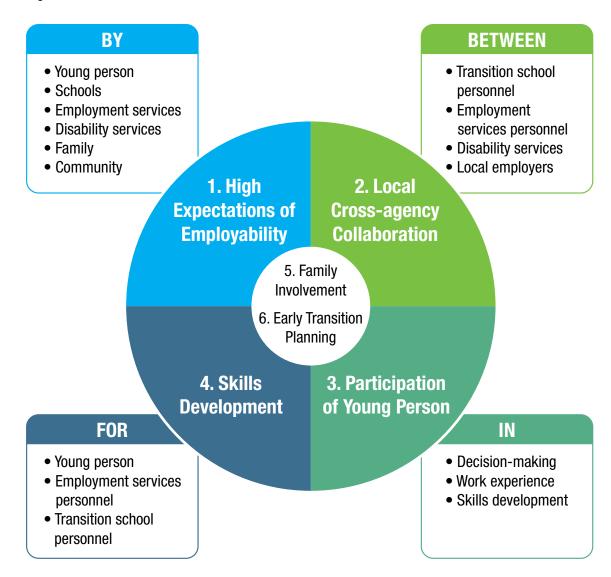
This paper reports on the literature that informs our understanding of the needs and recommended practices for key stakeholders when considering the transition to employment for young adults with disability, particularly those with intellectual and developmental disabilities (IDD).

### SUMMARY OF THE EVIDENCE

The research evidence points to six elements of effective transitions from school to employment for young people with disability. These elements, or 'principles', can be considered a shared vision for those supporting young people into employment. The principles and their relation to supporting the journey to employment are displayed in Figure 1.

- Expectation<sup>1–5</sup>
   Young people can work
- Collaboration<sup>3, 6–8</sup>
   Different sectors can work together
- Participation1, 5, 6, 9-13
   Young people should partake in meaningful work during their school years
- Skills development<sup>3-5, 11, 14-16</sup>
   Everyone involved in school transitions needs expertise
- 5. Family involvement<sup>12</sup>, 13, 15, 17, 18 Family-centred transitions have better outcomes
- 6. Early transition planning<sup>3</sup>, 11–13, 19 Early planning impacts outcomes

Figure 1. The shared vision: Six elements of effective school to employment transitions





## AN EFFECTIVE TRANSITION SERVICE ACCORDING TO THE EVIDENCE:

Building a streamlined, integrated local transition service for young people with disability requires the following:

- Local community consultation and 'buy-in' to create:
  - A collective local vision for the employment of young people with disability
  - A climate of respect and collegiality amongst service agencies
  - Lines of communication between service providers at all levels
  - Easily accessible local knowledge about service provider roles and capacities
- Commitment at each level of service provision to:
  - Learn about and understand the philosophy and purpose of other service groups
  - Build knowledge of the continuum of learning and skill development across school year levels, during the transition years and into the post-school environment
  - Identify and clarify roles, responsibilities and timelines for key actions across each service level
  - Identify key personnel in each organisation who can take responsibility for good communication practices
- Highly trained personnel at each service level who:
  - Understand the learning needs of young people with disability
  - Implement client and family-centred approaches
  - Facilitate interviewing based on principles of self-determination
  - Understand the needs and nuances of the local employment context

'Efforts to change the employment landscape for young people with IDD (intellectual and developmental disability) must ultimately occur at the level of individual communities' (Carter et al, 2016, p. 413)<sup>7</sup>

# THE ELEMENTS OF EFFECTIVE SCHOOL TO EMPLOYMENT TRANSITIONS

### BACKGROUND

The United Nations Convention on the Rights of Persons with Disabilities 2006 and Convention on the Rights of the Child 1989 recognise that all people with disability have the right to work "on an equal basis with others." It states that "this includes the right to the opportunity to gain a living by work freely chosen or accepted in a labour market and work environment that is open, inclusive and accessible to persons with disabilities". Despite these visions, young people with disability continue to face significant barriers to employment in their transition from school in Australia<sup>59</sup>.

In 2015, there were 2.1 million Australians of working age with disability. Of these, 1.0 million were employed and 114,900 were looking for work. Therefore, 53.4% of working age people with disability were in the labour force, compared to 83.2% of people with no disability.

The unemployment rate for people with disability was 10% compared to 5.3% for people with no reported disability. Only 25% of people with severe or profound core activity limitation were employed in 2015, compared to 58.9% of those with mild core activity limitation.

In 2015, employed people with disability were more likely to work part-time, compared with employed people without disability. 27.0% of people with disability were working full-time, compared with 53.8% of those without disability<sup>63, 64</sup>.

A lack of early planning and collaboration between community and employment services and schools<sup>57</sup>, combined with a low expectation that young people with disability will work upon leaving school <sup>61</sup>, contribute to poor employment outcomes for students with disability in Australia.

High-quality benchmarking is required if we are to track improvements in employment outcomes over the coming years. This is particularly important with the introduction of the National Disability Insurance Scheme, of which economic participation as a key principle.

## METHOD

A database search was conducted using keywords related to disability, employment, vocational rehabilitation, work skills, transition and youth for the period 2007 to 2017. 92 papers met the criteria for full text review and, from these,  $50^{1-10}$ , 15, 19-57 were included for data extraction. A further nine papers<sup>11-14</sup>, 16-18, 58, 59</sup> were added from hand-searching, meaning a total of 59 papers were used for the purpose of answering the following questions:

Our current knowledge of the best ways to support the journey to employment for young people with disability is drawn largely from observational and cross-sectional or 'snapshot' studies which have been conducted in the USA. These tend to focus on the experiences of young people with disability and their families, or factors that predict employment outcomes. 90 per cent of the papers reviewed for this Research to Action Guide fall into these research categories, and only a small number of studies have evaluated the effectiveness of programs designed to prepare young people with disability leaving school to enter the workforce. Cross-sectional and

experiential literature do provide a solid basis on which to build interventions and programs. However, studies which examine the effectiveness of these programs are urgently needed.

## THE RESEARCH QUESTIONS

What are the factors affecting employment participation for young adults with disability?

What are the key elements of effective service provision for young people with disability transitioning from education to employment?

### **Research Question 1:** What are the factors affecting employment participation for young adults with disability?

The factors affecting employment participation for young adults with disability identified in the literature generally fall into two categories. First, the environment, such as the physical, social and political environment and the service and employment context. Second are those that relate to the individual or 'person' factors, including being motivated to work, having the capacity for independence in self-care, having the social and work skills necessary for employment, and having a belief that employment is achievable. These factors are identified in the literature as being either positive (enabling) or negative (barriers) when considering their link to participation in employment. They have usually been identified through studies which correlate the things that have happened for a young person at one point in time with their employment status at a later point in time. They can be considered predictors of future employment, and may reasonably be assumed to have influence over outcomes, but not a direct causal effect.

## FACTORS IDENTIFIED AS ENABLERS FOR EMPLOYMENT Expectation

### 'Environment' factors

- High expectations of those around the young person<sup>20</sup>
- Being 'treated as an adult'22
- High parental expectations and experience with household chores<sup>1, 5</sup>
- Support with planning during the transition process<sup>20</sup>
- development Skills

<sup>2</sup>articipation

- Opportunities for young person to participate in career development activities<sup>24</sup> and vocational experiences<sup>34</sup>
- Provision of career-related services which include support to develop skills in problem-solving and stress management<sup>25</sup>
- Opportunities for work experience<sup>20</sup>
- Practical work experience, repeated over time  $^{\rm 22}$
- Paid work experiences<sup>1, 5</sup>
- Parent and family support and influence<sup>54</sup>
- Participation in vocational experiences at school as a starting point for a career pathway<sup>34</sup>
- Counselling and guidance for seeking and retaining job, including assistance on the

job19, 29

Early transition services<sup>19</sup>

### 'Person' factors

- Motivation and abilities<sup>20</sup>
- 'Readiness for adulthood' such as the ability to navigate post-school systems, ability to manage oneself physically, ability to deal with stress<sup>21</sup> and self-advocacy skills<sup>54</sup>
- Ability to manage personal care and other activities of daily living<sup>36</sup>
- Participation in developing Individual Education Plan (IEP) specification of employment or work goals, written with measurable outcomes<sup>24</sup>
- Characteristics such as self-determination, social skills, work competence, general education <sup>54</sup>
  - Career awareness and vocational skills<sup>10</sup>
  - 'Job readiness'<sup>19</sup>

## FACTORS IDENTIFIED AS BARRIERS TO EMPLOYMENT

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Expectations

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Expectation

development

Participation

Skills

### 'Environment' factors

- A lack of involvement with outside services during transition planning<sup>23</sup>
- Wait lists for services and/or diminished availability of services<sup>28</sup>
- A lack of capacity or willingness to adapt by workplace<sup>26</sup>
- Parental ideas or expectations that do not match the reality of what is available in terms of work
- Fear of losing benefits<sup>35</sup>
- Work environment factors such as being accepted as part of the team<sup>34</sup>
- Low expectations of those around the young person<sup>2</sup>
- Difficulty with transport<sup>2</sup>

### 'Person' factors

- A lack of employment may lead to unhealthy routines in an individual<sup>26</sup>
- Doubt (in oneself or by others) about readiness to 'become and adult' and the social skills required to participate in the workforce<sup>28</sup>



6

Low expectations, low level of independence and ability in life skills, low levels of confidence<sup>2</sup>

## SUMMARY OF BARRIERS AND ENABLERS IN SCHOOL TO EMPLOYMENT TRANSITIONS

There is strong evidence in the literature that work experience while at school is a key factor in predicting post-school employment<sup>1, 6, 11</sup>. In Australia, it has been shown that apprenticeships and traineeships are an effective way to achieve positive employment outcomes. Apprenticeships and traineeships provide paid, hands-on, on-the-job training with support and those with disability achieve similar outcomes to those without disabilities<sup>34</sup>. It is also evident that young people with disability require support to find an apprenticeship or traineeship, to

keep going, and to finish the traineeship $^{34}$ .

Research has found that paid work experience and supportive site visits not only help to build young people's skills, but also allay fears and concerns of employers about the prospect of employing and retaining a young person with disability<sup>10,39</sup>.

Studies have also found that independent self-care and highly-rated social skills in the classroom are related to employment outcomes<sup>1</sup>. In addition, an expectation of post-school employment by the young person, and the young person's family, school staff and vocational counsellors, is highly-correlated with post-school employment<sup>1, 5</sup>.

Findings also suggest that school and community-based vocational programs must be carefullytargeted to individual needs. In other words, support services must match the needs of the individual within the context of the environment<sup>35</sup>.

It is therefore incumbent on educators and vocational specialists to know the young people they are working with, and to understand the manner in which the key elements for effective service provision can be embedded in their organisation and program delivery.

## **Research Question 2:** What are the key elements of effective service provision for young people with disability transitioning from education to employment?

There are two key studies that inform the evidence answering this guestion. In 2016, Haber et al<sup>6</sup> pooled the findings from existing international studies on post-school employment outcomes and conducted a meta-analysis to explore trends and identify consistent results. They found that, although the existing literature is based largely on observational, crosssectional, experiential or predictive studies, they are now extensive enough to provide a solid foundation of information on which to base future programs and research. These authors used the substantive body of research investigating relationships between what happens during the school years and post-school outcomes to assess which experiences have the strongest relationship with which outcomes. This provides us with the best available - and reasonably reliable - indicators of the elements for effective service provision for young people transitioning from education to employment. The findings reinforced the value and continued relevance of Kohler's<sup>12</sup> Taxonomy of Transition Practices consisting of studentfocused planning, student development, family involvement, attention to program structure and interagency collaboration. Importantly, Haber et al found that some of the least-studied predictors were those that have the strongest effects on employment outcomes, such as interagency collaboration.

Combining the key constructs of Kohler's<sup>12</sup> Taxonomy of Transition Practices from 1996 and Haber et al's 2016 papers with other relevant evidence, the key elements of effective service provision for young people with disability transitioning from education to employment can be described as:

### **1. EXPECTATION**

Service organisations, including schools, disability employment services and community agencies, must have an expectation and belief that young people with disability can and will work when they leave  $school^{1-3}$ .

- Educators, health professionals and disability workers must convey a belief in the capacity of the young person for work and community contribution, and take active steps to foster this expectation in their colleagues and the young person's family.
- One of four key attributes identified in a study of successful disability employment specialists was 'principled optimism'. This means the workers believed in the capabilities of the young people they were working with and in their own capacity to support those young people into work<sup>4</sup>.
- Belief and expectation as the forerunners to possibility have been supported by several studies<sup>1, 2</sup> and "high expectations and the assumption of employability for all young people with disability" have been articulated elsewhere as key elements of quality transition services<sup>62</sup>.

This is not new, but it remains current! Early<sup>58</sup> and recent work<sup>18</sup> clearly state the need for high expectations, and contemporary work by Pleet–Odle, A., et al. <sup>18</sup> has suggested guidelines on how to achieve this with families. This article provides strategies and activities to create

expectation in working with families. In doing so, we may see a flow-on effect influencing the culture in education settings and service organisations.

## 2. COLLABORATION, WITH AN EMPHASIS ON INTERAGENCY COLLABORATION

Interagency collaboration is one of the strongest predictors of employment  $^{6}$ , yet little is known about how to make it happen.

Best practice in 'transition to work' services and systems includes interagency collaboration. In fact, interagency collaboration has been found to be one of the strongest predictors of employment<sup>6</sup> – though little is known about what it looks like in practice, how we move towards it, or how we measure it. In 2016 in the USA, community consultations were conducted to see what local communities do to solve the issue of poor employment rates for young people with disability<sup>7</sup>. They found that there was a desire in local communities to:

- Develop employment opportunities by working with local council bodies and educating, supporting and rewarding local employers who hire young people with disability;
- Strengthen school and transition services by providing integrated opportunities for young people with disability to acquire 'work skills, attitudes and experiences' throughout the year;
- Equip young people with disability with strategies for social and professional networking that can lead to employment;
- Provide opportunities for 'mock interviews' before going on work experience or applying for jobs;
- Encourage young people to seek work-related learning opportunities outside the school setting;
- Encourage young people to link with existing networks, including vocational and employment services and civic and service clubs;
- Hold a local 'jobs fair' where employers come to meet prospective employees;
- Enhance and promote inclusive workplaces; and
- Support families in transition to actively participate in this process and engage in networking and social connection.

There is much in the literature (and practice) that indicates an unwillingness or lack of ability in agencies to understand the role of other service providers. This has led to service siloes, blame-shifting and inefficiencies. A survey of school teachers and vocational counsellors in the USA<sup>3</sup> found that both groups rated the importance of collaboration as high, but the feasibility of it occurring as low. Although interagency collaboration was a key variable in improving post-school employment outcomes, it occurred infrequently and was poorly understood. Barriers to interagency collaboration were thought to include:

- Differences in 'philosophies, language and procedures' which might bias each professional group towards their own way of thinking;
- Transition professionals having limited skills in collaboration with few opportunities to develop these skills; and

• A lack of optimism about whether collaborative practices could be improved.

School and vocational systems seem to remain separate. For this to change, teachers and employment specialists must find ways to align their beliefs about post-school outcomes for young people with disability.

## Those involved in school to employment transitions must develop a shared vision, understand each other's roles and share information $^3$ .

Given that work experience prior to leaving school is crucial, vocational programs in schools that coordinate with local community services would seem one effective way of building collaborative processes<sup>8</sup>. Community and disability employment services must work collaboratively with schools to establish effective pathways. There is a need for developing clear parameters, definitions and processes for interagency collaborations, and a need to measure the outcomes of this.

### **3. PARTICIPATION, WITH AN EMPHASIS ON STUDENT-FOCUSED PLANNING**

Participation in meaningful paid and unpaid work experiences during the last years of secondary school is consistently the most significant indicator of post-school success 1, 5, 6.

- Young people with disability who exit school with a job are more likely to maintain a positive career trajectory than those who do not<sup>1</sup>.
- Having held a paid, community-based job while still in high school was strongly correlated with post-school employment success<sup>1</sup>.
- Paid work at high school not only helped build skills in young people with disability, but also allayed the fears and concerns of employers<sup>55</sup>.
- Parent and family participation in transition planning increased the likelihood of getting a job<sup>5</sup>.
- Participating in early work experiences, traineeship and apprenticeship are all associated with higher likelihood of employment<sup>5, 9</sup>.
- Participation by employers in supported employment programs that allow young people with disability to work in competitive work settings with ongoing supports<sup>55</sup> is significant.

As part of building local collaborative practice, service organisations (both educational and post-school vocational) must ensure young people with disability and their families participate actively in any decision-making processes, and in each of the following:

- Career development activities that assist with exploring vocational preferences and opportunities  $^{1,\; 6}$
- Decision-making meetings and processes, such as Individual Education Plan meetings<sup>12</sup>, 13
- Work experience<sup>1, 5</sup>
- Skills development<sup>11</sup>

- Vocational training<sup>11</sup>
- After-school work<sup>11</sup>

## 4. STUDENT AND SERVICE PROVIDER SKILLS DEVELOPMENT

Skills development is required not just for young people with disability but for those who work with them on their journey to employment.

Research has shown that from the early secondary years, schools must set programs in place that prepare young people for work by developing vocational and employability skills and include opportunities for work experience11. Vocational development during school that provides students with authentic opportunities to acquire important work skills and values informs their vocational decision-making and shapes their career aspirations<sup>14, 16</sup>.

Skill development is required not just for young people with disability but for those who work with them on their journey to employment, particularly educators and employment specialists<sup>3</sup>. Support to develop these skills might include:

- Training in person-centred approaches to conducting transition and employment preparation meetings  $^{15}\,$
- Training and skills development in developing creative and responsive vocationalpreparation activities and programs both at school and in the community<sup>11</sup>
- Training and development in the roles and responsibilities of each of the different service providers  $^{3}\,$

Employment specialists in schools and community organisations provide a crucial resource for helping young people with disability to find and retain a job<sup>4</sup>. People working in these roles require a unique mix of skills and characteristics. To be effective, employment and transition services need to consider ways to attract and advance individuals with compatible characteristics and explore whether these core skills and competencies can be developed.

Desirable attributes and skills in employment specialists are noted as<sup>4</sup>:

- Principled optimism high expectations and a belief that young people can and will work, and that they personally have the skills to facilitate this;
- Cultural competence a broad understanding of the way values, norms and traditions influence how people act, and why it is important to understand these influences in the pursuit of skills for employment;
- Business orientation approaches that show a capacity for understanding business needs and the importance of customer service; and
- Networking ability that is creative, strategic, and responds to business needs.

Employment specialists must have skills in discovery and assessment; building employer relationships; job matching; and providing or building workplace supports<sup>4</sup>.

Other suggestions for building skills include group training sessions for families<sup>15</sup> and programs that include principles of self-determination, social skills applied to the work setting, work competence and general education. These have been linked with greater likelihood of getting a job<sup>5</sup>.

#### Key message for all service providers

Young people with disability are often provided with fewer opportunities for developing work-ready skills when, in fact, they need more frequent and more varied opportunities for skills to consolidate and become transferable from one setting to another.

### **5. FAMILY INVOLVEMENT**

Families that are involved in discussions about future careers and are active in networking and making links with employers in the local community have a positive influence on work-related outcomes for young people with disability<sup>15</sup>.

There is much evidence supporting the view that family-centred transition planning helps to increase student and parent expectations for the future, self-determination, and vocational decision-making<sup>12</sup>, 13, 15, 17. Families that are involved in discussions about future careers and are active in networking and making links with employers in the local community have a positive influence on work-related outcomes for young people with disability<sup>15</sup>.

Seven strategies were developed by a parent advocacy group for professionals aiming to support increased parental involvement<sup>18</sup>:

- 1. Engage parents in training opportunities and information sessions at school about postschool and community-based services:
  - Include transition information and introductions to employment services
  - Include families in visits to adult service agencies
- 2. Partner with families to explore role models who can provide a vision to the young person and their family of what adult life might be like:
  - Connect the young person and their family to successful adults with disability
  - Set up family support groups focused on transition to adulthood issues, including seeking and finding employment
- Interact respectfully with families, taking into account unique cultural or social values and perspectives
- 4. Begin planning for post-school activities early, and engage families in the planning process through Individual Education Plans
- 5. Partner with families to support the young person's independence:
  - Young people who are independent in daily living skills and mobile within the community are more likely to be employed post-school
- 6. Partner with families to build networks in the community
- 7. Work with families to support students in domains of life beyond work such as recreation and leisure, continued education and community participation

Please refer to the article by Pleet-Odle et al for details of activities that align with these seven strategies<sup>18</sup>.

## 6. EARLY TRANSITION PLANNING, INCLUDING ATTENTION TO TRANSITION PROGRAM STRUCTURE

Students who receive early transition services (at age 14) are more likely to achieve employment outcomes compared to those who start transition services at age 16<sup>19</sup>.

Research shows that student-identified transition goals and participation in employmentrelated activities lead to a higher likelihood of employment post-school<sup>11</sup>. Involvement of community-based employment organisations and transition services early in the transition process is crucial to successful post-school employment outcomes<sup>47</sup>.

Transition planning should adopt the taxonomy first developed by Kohler<sup>12</sup> (and recently updated<sup>13</sup>) which states that transition-focused planning begins no later than age 14<sup>13</sup>. Kohler's updated model retains the five practice categories described in the earlier model (Family Engagement, Program Structures, Interagency Collaboration, Student Development, and Student-focused Planning) but includes updated activities and structure.

For effective transitions from school to employment, early transition planning is crucial so that school-based programs can take into account the work aspirations and skill development requirements to enable young people with disability to achieve employment. The Taxonomy for Transition Programming 2.0 provides a "model for planning, organising and evaluating transition education services and programs"<sup>13</sup> which has remained relevant for more than 20 years and should not be ignored.

## **EVIDENCE-BASED RECOMMENDATIONS FOR FUTURE SUPPORT**

Frameworks and interventions that collaboratively incorporate the elements of effective school to employment transitions need to be developed. These might include:

- A conceptual framework and funding model for developing and implementing a crossagency collaborative approach to supporting transition to employment
- Training and skill development programs for school and employment agency personnel for supporting students in their transition to employment
- Work experience programs co-constructed by schools and employment services to fit the local work context
- The development of sequenced, scaffolded work skills curricula for implementation at school and continued post-school
- Embedded structured, scaffolded work experience placements repeated throughout the transition years at school and continued post-school
- Exploring the use of simulated work experiences in order to develop skills for work experience in real settings

### **EVIDENCE GAPS AND FUTURE RESEARCH**

Running alongside the development of frameworks and interventions is the need for robust evaluation. Research has so far been mostly observational, cross-sectional or exploratory in nature. The findings from this research provide a valuable platform on which to build programs and interventions. Studies that examine the effectiveness of these programs are now urgently needed (see Figure 2 for a visual representation of the research agenda past, present and future).

Figure 2. Research past, present and future

**Past studies have been mostly:** Observational studies (what happens in practice)

> **Current studies are mostly:** Studies identifying factors affecting employment outcomes

### Future studies must include:

Studies evaluating the effectiveness of programs, longitudinal analysis of employment outcomes, effectiveness of programs implemented under the NDIS

## FUTURE RESEARCH SHOULD INCLUDE:

#### Interagency collaboration

- Exploration of interagency collaboration: what it is, how we define it and how we
  measure it
- Once defined, research is needed to evaluate the impact of implementing an interagency collaborative approach: does it improve post-school outcomes in line with expectations?

### Work experience and skills development programs

- Evaluation of work skills development programs, preferably those designed to compare two different approaches, or compare the effect of participating in a work skill program with not participating in the program at different times
- Evaluation of systematically co-constructed work experience programs, ideally compared to existing programs or approaches to work experience
- Studies that evaluate the effectiveness of vocational preparation programs at school or post-school, particularly those that are tailored to meeting the needs of the local community and employment context
- Studies examining the barriers and enablers to open employment, with an emphasis on effective practices (e.g., HR practices, policy, effectiveness of traineeships, local government practices)
- Studies that benchmark existing school transition programs against best practice approaches such as Kohler's Taxonomy of Transition Practices
- Longitudinal studies that track the educational attainment and post-school employment experiences of young people with disability for 10 to 15 years following school

### The National Disability Insurance Scheme

- Longitudinal studies tracking employment participation following the introduction of the NDIS, effective benchmarking of employment via the NDIS
- Analysis of the role of the NDIS in supporting participation in employment, including skill development and the provision of supports in employment settings

### **FINAL MESSAGES**

An active focus on employment outcomes is necessary.

Youth with disability face similar challenges in finding employment as youth without disability, but to a greater degree and in more areas  $^2$ .

Opportunities for career and skill development are required more frequently for young people with disability.

## **REFERENCES**:

- Carter, E.W., D. Austin, and A.A. Trainor, Predictors of postschool employment outcomes for young adults with severe disabilities. Journal of Disability Policy Studies, 2012. 23(1): p. 50–63.
- 2. Lindsay, S., et al., 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, 2015. 37(8): p. 701–711.
- Taylor, D.L., R.L. Morgan, and C.A. Callow–Heusser, A survey of vocational rehabilitation counselors and special education teachers on collaboration in transition planning. Journal of Vocational Rehabilitation, 2016. 44(2): p. 163–173.
- 4. Tilson, G. and M. Simonsen, The personnel factor: Exploring the personal attributes of highly successful employment specialists who work with transition-age youth. Journal of Vocational Rehabilitation, 2013. 38(2): p. 125–137.
- 5. Wehman, P., et al., Predictors of Successful Transition from School to Employment for Youth with Disabilities. Journal of Occupational Rehabilitation, 2015. 25(2): p. 323–334.
- 6. Haber, M.G., et al., What Works, When, for Whom, and With Whom: A Meta-Analytic Review of Predictors of Postsecondary Success for Students With Disabilities. Review of Educational Research, 2016. 86(1): p. 123–162.
- Carter, E.W., et al., Engaging Communities in Identifying Local Strategies for Expanding Integrated Employment During and After High School. Ajidd–American Journal on Intellectual and Developmental Disabilities, 2016. 121(5): p. 398–418.
- Siperstein, G.N., M. Heyman, and J.E. Stokes, Pathways to employment: A national survey of adults with intellectual disabilities. Journal of Vocational Rehabilitation, 2014. 41(3): p. 165–178.
- Cocks, E., S.H. Thoresen, and E.A.L. Lee, 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, 2013. 39(3): p. 205–217.
- 10. Wehman, P., et al., Competitive Employment for Youth with Autism Spectrum Disorders: Early Results from a Randomized Clinical Trial. Journal of Autism & Developmental Disorders, 2014. 44(3): p. 487–500.
- 11. Joshi, G.S., E.C. Bouck, and Y. Maeda, Exploring employment preparation and postschool outcomes from students with mild intellectual disability. Career Development and Transition for Exceptional Individuals, 2012. 35(2): p. 97–107.
- 12. Kohler, P.D., A taxonomy for transition programming: linking research and practice. 1996, Champaign Illinois: University of Illinois.
- 13. Kohler, P.D., et al., Taxonomy for transition programming 2.0: a model for planning, organizing, and evaluating transition education, service, and progams. 2016, Kalamazoo Michigan: Western Michigan University.

- Grigal, M., D. Hart, and A. Migliore, Comparing the transition planning, postsecondary education, and employment outcomes of students with intellectual and other disabilities.
   Career Development for Exceptional Individuals, 2011. 34(1): p. 4–17.
- Hagner, D., et al., Outcomes of a family-centered transition process for students with autism spectrum disorders. Focus on Autism and Other Developmental Disabilities, 2012. 27(1): p. 42–50.
- Miles Morgan Australia, Guidelines for facilitating the career development of young people with disabilities: a research paper for the Career Industry Council of Australia.
   2012, Career Industry Council of Australia Greensborough Victoria.
- 17. Meadows, D., Where have all our students gone? School to postschool transition in Australia. Australasian Journal of Special Education, 2009. 33(2): p. 87.
- Pleet-Odle, A., et al., Promoting high expectations for postschool success by family members: a"To-Do" list for professionals. Career Development and Transition for Exceptional Individuals, 2016. 39(4): p. 249–255.
- 19. Cimera, R.E., S. Burgess, and P.L. Bedesem, Does providing transition services by age 14 produce better vocational outcomes for students with intellectual disability. Research and Practice for Persons with Severe Disabilities, 2014. 39(1): p. 47–54.
- 20. Achterberg, T.J., H. Wind, and M.H.W. Frings–Dresen, What are the most important factors for work participation in the young disabled? an expert view. Disability and Rehabilitation: An International, Multidisciplinary Journal, 2012. 34(18): p. 1519–1525.
- 21. Bagatell, N., et al., "Thrust into adulthood": transition experiences of young adults with cerebral palsy. Disability and Health Journal, 2017. 10(1): p. 80–86.
- 22. Beyer, S., A. Meek, and A. Davies, Supported work experience and its impact on young people with intellectual disabilities, their families and employers. Advances in Mental Health and Intellectual Disabilities, 2016. 10(3): p. 207–220.
- 23. Bouck, E.C. and G.S. Joshi, Transition and students with mild intellectual disability: findings from the National Longitudinal Transition Study–2. Career Development and Transition for Exceptional Individuals, 2016. 39(3): p. 154–163.
- 24. Brewer, D., et al., Evaluation of a Multi–site Transition to Adulthood Program for Youth with Disabilities. Journal of Rehabilitation, 2011. 77(3): p. 3–13.
- 25. Briel, L.W. and E.E. Getzel, In their own words: The career planning experiences of college students with ASD. Journal of Vocational Rehabilitation, 2014. 40(3): p. 195–202.
- 26. Butcher, S. and R. Wilton, Stuck in transition? Exploring the spaces of employment training for youth with intellectual disability. Geoforum, 2008. 39(2): p. 1079–1092.
- 27. Carter, E.W., D. Austin, and A.A. Trainor, Factors associated with the early work experiences of adolescents with severe disabilities. Intellectual and Developmental Disabilities, 2011. 49(4): p. 233–247.
- Cheak-Zamora, N.C., M. Teti, and J. First, 'Transitions are scary for our kids, and they're scary for us': Family member and youth perspectives on the challenges of transitioning to adulthood with autism. Journal of Applied Research in Intellectual Disabilities, 2015. 28(6): p. 548-560.

29.	Chen, J.L., C. Sung, and S. Pi, Vocational Rehabilitation Service Patterns and Outcomes for Individuals with Autism of Different Ages. Journal of Autism and Developmental Disorders, 2015. 45(9): p. 3015–3029.
30.	Chiang, HM., et al., Factors Associated with Participation in Employment for High School Leavers with Autism. Journal of Autism & Developmental Disorders, 2013. 43(8): p. 1832–1842.
31.	Christensen, J.J., et al., Longitudinal outcomes of Project SEARCH in upstate New York. Journal of Vocational Rehabilitation, 2015. 42(3): p. 247–255.
32.	Cimera, R.E., S. Burgess, and A. Wiley, Does Providing Transition Services Early Enable Students With ASD to Achieve Better Vocational Outcomes as Adults? Research & Practice for Persons with Severe Disabilities, 2013. 38(2): p. 88-93.
33.	Cimera, R.E., et al., Vocational rehabilitation services and outcomes for transition-age youth with visual impairments and blindness. Journal of Vocational Rehabilitation, 2015. 43(2): p. 103-111.
34.	Cocks, E., S.H. Thoresen, and E.A.L. Lee, Pathways to employment and quality of life for apprenticeship and traineeship graduates with disabilities. International Journal of Disability, Development and Education, 2015. 62(4): p. 422–437.
35.	Ellenkamp, J.J.H., et al., Work Environment–Related Factors in Obtaining and Maintaining Work in a Competitive Employment Setting for Employees with Intellectual Disabilities: A Systematic Review. Journal of Occupational Rehabilitation, 2016. 26(1): p. 56–69.
36.	Foley, K.R., et al., Young adults with intellectual disability transitioning from school to post-school: A literature review framed within the ICF. Disability and Rehabilitation, 2012. 34(20): p. 1747-1764.
37.	Foley, K.R., et al., Functioning and postOschool transition outcomes for young people with Down syndrome. Child: Care, Health and Development, 2013. 39(6): p. 789-800.
38.	Fraker, T.M., et al., An analysis of 1-year impacts of youth transition demonstration projects. Career Development and Transition for Exceptional Individuals, 2016. 39(1): p. 34-46.
39.	Garcia-Iriarte, E., F. Balcazar, and T. Taylor-Ritzler, Analysis of case managers' support of youth with disabilities transitioning from school to work. Journal of Vocational Rehabilitation, 2007. 26(3): p. 129-140.
40.	Giesen, J.M. and B.S. Cavenaugh, Transition-age youths with visual impairments in vocational rehabilitation: A new look at competitive outcomes and services. Journal of Visual Impairment & Blindness, 2012. 106(8): p. 475-487.
41.	Gold, P.B., E.S. Fabian, and R.G. Luecking, Job Acquisition by Urban Youth With Disabilities Transitioning From School to Work. Rehabilitation Counseling Bulletin, 2013. 57(1): p. 31-45.
42.	Hall, J., R.L. Morgan, and C.L. Salzberg, Job-preference and job-matching assessment results and their association with job performance and satisfaction among young adults with developmental disabilities. Education and Training in Autism and Developmental Disabilities, 2014. 49(2): p. 301-312.

- 43. Herbert, J.T., D.C. Lorenz, and J. Trusty, Career assessment practices for high school students with disabilities and perceived value reported by transition personnel. Journal of Rehabilitation, 2010. 76(4): p. 18–26.
- 44. Lewis, G., S.H. Thoresen, and E. Cocks, Successful approaches to placing and supporting apprentices and trainees with disability in Australia. Journal of Vocational Rehabilitation, 2011. 34(3): p. 181–189.
- 45. Lewis, G., S.H. Thoresen, and E. Cocks, Post-course outcomes of apprenticeships and traineeships for people with disability in Western Australia. Journal of Vocational Rehabilitation, 2011. 35(2): p. 107-116.
- 46. Lidz, C.W. and L.M. Smith, Employment specialists' perspectives on implementing supported employment with young adults. American Journal of Psychiatric Rehabilitation, 2016. 19(4): p. 339–352.
- 47. Taylor, J.L., et al., A systematic review of vocational interventions for young adults with autism spectrum disorders. Pediatrics, 2012. 130(3): p. 531–538.
- 48. Lynas, L., Project ABLE (Autism: Building Links to Employment): A specialist employment service for young people and adults with an autism spectrum condition. Journal of Vocational Rehabilitation, 2014. 41(1): p. 13–21.
- 49. McConnell, A.E., et al., Identifying nonacademic behaviors associated with postschool employment and education. Career Development and Transition for Exceptional Individuals, 2013. 36(3): p. 174–187.
- 50. Müller, E. and R. Vangilder, The relationship between participation in Project SEARCH and job readiness and employment for young adults with disabilities. Journal of Vocational Rehabilitation, 2014. 40(1): p. 15–26.
- 51. Noel, V.A., et al., Barriers to Employment for Transition-age Youth with Developmental and Psychiatric Disabilities. Administration and Policy in Mental Health and Mental Health Services Research, 2016: p. 1–5.
- 52. Nota, L., M.C. Ginevra, and L. Carrieri, Career interests and self defficacy beliefs among young adults with an intellectual disability. Journal of Policy and Practice in Intellectual Disabilities, 2010. 7(4): p. 250–260.
- Bumrill, P., et al., Vocational rehabilitation services and outcomes for transition-age youth with traumatic brain injuries. Journal of Head Trauma Rehabilitation, 2016. 31(4): p. 288-295.
- 54. Wehman, P., Transition From School to Work: Where Are We and Where Do We Need to Go? Career Development for Exceptional Individuals, 2013. 36(1): p. 58–66.
- 55. Wehman, P., et al., Effect of supported employment on vocational rehabilitation outcomes of transition-age youth with intellectual and developmental disabilities: A case control study. Intellectual and Developmental Disabilities, 2014. 52(4): p. 296–310.
- 56. Wehman, P., et al., Employment for adults with autism spectrum disorders: A retrospective review of a customized employment approach. Research in Developmental Disabilities, 2016. 53–54: p. 61–72.
- 57. Winn, S. and I. Hay, Transition from school for youths with a disability: Issues and challenges. Disability and Society, 2009. 24(1): p. 103–115.

- 58. Kraemer, B.R. and J. Blacher, Transition for young adults with severe mental retardation: school preparation, parent expectations, and family involvement. Mental Retardation, 2001. 39(6): p. 423-435.
- 59. Honey, A., et al., Employment status transitions among young adults, with and without disability. Australian Journal of Social Issues, 2014. 49(2): p. 151–170.
- 60. Australian Bureau of Statistics, 'Disability-education and employment'. Disability, ageing and carers, Australia: summary of findings. 2012, Commonwealth of Australia: Canberra.
- 61. Children with Disability Australia, Post school transition: the experiences of students with disability. 2015, Children with Disability Australia: Cliffton Hill Victoria.
- 62. ARTD Consultants, Ticket to work pilot outcomes study: a quasi-experimental evaluation of pathways from school to economic and social inclusion: report for National Disability Services. 2016, National Disability Service: NSW.
- 63. Australian Bureau of Statistics, 4430.0 Disability, Ageing and Carers, Australia: Summary of Findings. 2015
- 64. Australian Institute of Health and Welfare, Australia's Welfare 2017; Section 8.2 Participation in society by people with disability. 2017



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