This publication is dedicated to Chris Selby Smith, who was posthumously awarded the 2009 NCVER VET Researcher of the Year Award. Selby Smith’s body of work displayed many aspects of the excellence for which the award is offered. His experience working in both academia and the public service gave him an appreciation of both audiences and allowed him to make a successful connection between research and decision-making in public policy. Moreover, he had a meticulous eye for detail, his use of various methodologies was both appropriate and well applied, and he had a clear writing style that made his work accessible to both policy advisers and his academic peers.

Throughout his career, Chris Selby Smith worked for many research organisations and was a driving force in the wider research effort within vocational education and training (VET). In 1992 he co-founded the Centre for the Economics of Education and Training at Monash University.

One of Selby Smith’s particular interests was research into VET and people with a disability. In a chapter he co-wrote for the Elsevier International Encyclopedia of Education (with Fran Ferrier, 2010), Selby Smith highlighted issues that are pertinent to furthering debate and action on ways to improve the lives of people with disabilities. They suggested that we need to know more about how the type of disability affects engagement with training; what outcomes people are achieving; and what employers think (Ferrier & Selby Smith 2010).

Selby Smith and Ferrier also called for more ideas on workable funding models and services, such as career advice and staff development, and underlined the difficulties in building our knowledge, given the unreliability of the data available for studying the topic.

This publication addresses these issues. First of all we present some recent statistics on VET students with a disability; we then summarise the findings of recent research published or being undertaken by NCVER. Finally, we discuss some of the challenges of undertaking research in this area.
WHAT THE DATA TELL US ABOUT VET AND PEOPLE WITH DISABILITY

Data on the participation in, and outcomes of, vocational education and training for people with a disability are collected by the National Centre for Vocational Education Research (NCVER) through the National VET Provider Collection, the National Apprentice and Trainee Collection and the Student Outcomes Survey. The reliance on self-disclosure means there are limitations in these datasets, as discussed in the final section of this publication. This section provides a snapshot of the current data.

While commencements in apprenticeships and traineeships for people without a disability have increased, this is not so for people with a disability.

Access and participation

Table 1 shows the number of VET students who disclosed that they had a disability in each year from 2002 to 2010. The data show that, while overall the numbers of students with a disability have increased over time, since 2005 the percentage of VET students disclosing a disability has hovered at around 6%. The most common disability reported by students in 2010 was that arising from a medical condition, followed by a learning disability and physical disability (table 2).

Table 1  VET students by disability status (including impairment or long-term condition), Australia, 2002–10

<table>
<thead>
<tr>
<th>Disability status</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Annual growth rate1 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>With a disability</td>
<td>82,305</td>
<td>91,902</td>
<td>90,785</td>
<td>96,885</td>
<td>102,375</td>
<td>102,106</td>
<td>99,486</td>
<td>100,918</td>
<td>110,088</td>
<td>3.7</td>
</tr>
<tr>
<td>Without a disability</td>
<td>1,341,272</td>
<td>1,353,185</td>
<td>1,238,654</td>
<td>1,240,437</td>
<td>1,259,914</td>
<td>1,311,982</td>
<td>1,372,549</td>
<td>1,379,934</td>
<td>1,444,091</td>
<td>0.9</td>
</tr>
<tr>
<td>Not known2</td>
<td>271,846</td>
<td>282,481</td>
<td>276,925</td>
<td>313,438</td>
<td>313,675</td>
<td>250,930</td>
<td>227,709</td>
<td>225,826</td>
<td>244,815</td>
<td>-1.3</td>
</tr>
<tr>
<td>Total</td>
<td>1,695,423</td>
<td>1,727,568</td>
<td>1,606,364</td>
<td>1,650,760</td>
<td>1,675,964</td>
<td>1,665,018</td>
<td>1,699,744</td>
<td>1,706,678</td>
<td>1,798,994</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Students with a disability as a proportion of all VET students (%) 4.9 5.3 5.7 5.9 6.1 6.1 5.9 5.9 6.1 -

Notes: 1 Annual rates of growth for the period 2002–10 are compound growth rates. 2 Care should be taken when using the data in this table due to the large number of students where disability status is ‘Not known’.


Table 2  VET students by disability status and type of disability, Australia, 2010

<table>
<thead>
<tr>
<th>Disability type reported</th>
<th>Total disabilities</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing/deaf</td>
<td></td>
<td>11,330</td>
<td>8.4</td>
</tr>
<tr>
<td>Physical</td>
<td></td>
<td>18,131</td>
<td>13.4</td>
</tr>
<tr>
<td>Intellectual</td>
<td></td>
<td>10,700</td>
<td>7.9</td>
</tr>
<tr>
<td>Learning</td>
<td></td>
<td>21,478</td>
<td>15.8</td>
</tr>
<tr>
<td>Mental illness</td>
<td></td>
<td>15,837</td>
<td>11.7</td>
</tr>
<tr>
<td>Acquired brain impairment</td>
<td></td>
<td>2,420</td>
<td>1.8</td>
</tr>
<tr>
<td>Vision</td>
<td></td>
<td>14,668</td>
<td>10.8</td>
</tr>
<tr>
<td>Medical condition</td>
<td></td>
<td>23,455</td>
<td>17.3</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>13,155</td>
<td>9.7</td>
</tr>
<tr>
<td>Not specified</td>
<td></td>
<td>4,483</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>135,657</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Not surprisingly, commencements in apprenticeships and traineeships are lower for people with a disability compared with those without (simply due to the prevalence of disability in the population). Figure 1 shows how, since 1999, the number of apprentice and trainee commencements has changed for people with a disability and ‘other’ (which includes people without a disability and those whose disability status is unknown). What this figure reveals is that, while there has been a substantial increase in commencements for people without a disability over this time period, this has not been observed for people with a disability.

**Figure 1** Apprentice and trainee commencements\(^{(a)}\) by disability status, 1999–2009

![Graph showing apprentice and trainee commencements by disability status, 1999–2009.](graph)

**Notes:**

- (a) 12 months ending 31 December.
- (b) Includes without disability and not known.

**Source:** National Apprentice and Trainee Collection, September 2010 estimates.

People with a disability are more likely to complete lower-level qualifications, which may affect employment outcomes.

### Completions and employment outcomes of training

In addition to looking at participation in VET, it is important to look at outcomes for people with a disability. Table 3 shows course completions by disability status for the different qualification levels. For both people with a disability and those without (including those whose status is unknown), certificate III is the most commonly completed qualification level, although it is lower for people with a disability. People with a disability are more likely to complete lower-level qualifications. This could potentially affect employment outcomes, with Stanwick (2006) showing that lower-level courses are less likely to lead directly to employment.

**Table 3** Course completions by disability status and qualification level, 2008

<table>
<thead>
<tr>
<th></th>
<th>With disability</th>
<th>Other(^{(a)})</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma or higher</td>
<td>10.0</td>
<td>14.1</td>
<td>13.9</td>
</tr>
<tr>
<td>Certificate IV</td>
<td>15.3</td>
<td>18.3</td>
<td>18.2</td>
</tr>
<tr>
<td>Certificate III</td>
<td>31.5</td>
<td>40.9</td>
<td>40.4</td>
</tr>
<tr>
<td>Certificate II</td>
<td>26.2</td>
<td>19.9</td>
<td>20.2</td>
</tr>
<tr>
<td>Certificate I</td>
<td>17.1</td>
<td>6.8</td>
<td>7.3</td>
</tr>
</tbody>
</table>

**Note:**

1. Includes without disability and not known.

**Source:** National VET Provider Collection, 2008 (unpublished).

Data from the Student Outcomes Survey shows that people with a disability are, in fact, much less likely to be employed after their training than people without disability (table 4). However, recent research using data from the Household, Income and Labour Dynamics in Australia (HILDA) survey shows that completing a VET qualification significantly improves the likelihood of subsequent employment for people with a disability. These findings are discussed in the following section.
New research hopes to show how training might improve other outcomes besides those related to employment.

**Other outcomes of VET**

Employment outcomes are only one reason why people, including those with a disability, embark on a VET course. There is little in the literature on how training might improve other outcomes, such as quality of life or social inclusion. This gap will be addressed by a three-year program of research being conducted by Curtin University, funded by NCVER through the National VET Research and Evaluation Program. This research will investigate the social and economic outcomes for people with a disability who have completed an apprenticeship or traineeship.

The National VET Equity Advisory Council argues that, for learners who come to VET with a low set of skills, small transitions and improvements in the quality of life are important outcomes (2011). The council is developing an outcomes framework to encompass a range of positive outcomes for disadvantaged learners.

---

**Table 4**

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>50.6</td>
<td>58.6</td>
<td>60.4</td>
<td>58.8</td>
<td>57.6</td>
<td>55.8</td>
<td>53.5</td>
</tr>
<tr>
<td>Unemployed</td>
<td>16.2</td>
<td>17.6</td>
<td>15.4</td>
<td>17.8</td>
<td>18.4</td>
<td>18.9</td>
<td>22.8</td>
</tr>
<tr>
<td>Not in labour force</td>
<td>31.6</td>
<td>22.7</td>
<td>22.8</td>
<td>22.4</td>
<td>23.2</td>
<td>24.4</td>
<td>22.7</td>
</tr>
<tr>
<td>Not employed (NFI)</td>
<td>1.6</td>
<td>1.2</td>
<td>1.3</td>
<td>1.0</td>
<td>0.7</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>No disability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>76.9</td>
<td>81.4</td>
<td>81.5</td>
<td>83.2</td>
<td>82.9</td>
<td>79.8</td>
<td>78.6</td>
</tr>
<tr>
<td>Unemployed</td>
<td>11.1</td>
<td>9.0</td>
<td>9.3</td>
<td>7.8</td>
<td>8.3</td>
<td>10.6</td>
<td>12.0</td>
</tr>
<tr>
<td>Not in labour force</td>
<td>11.7</td>
<td>9.2</td>
<td>8.9</td>
<td>8.7</td>
<td>8.5</td>
<td>9.2</td>
<td>9.1</td>
</tr>
<tr>
<td>Not employed (NFI)</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Note: NFI = No further information.

Additional data on students with a disability are available from the online statistical compendium on the NCVER website: <http://www.ncver.edu.au/publications/2394.html>.

---

**Recent Research**

This section summarises research either conducted by NCVER or funded through the National VET Research and Evaluation Program. Using a mix of quantitative and qualitative approaches, these research projects tackle some of the major gaps in the literature relating to the outcomes of VET for people with a disability, employer views on hiring people with a disability, and the disclosure of mental illness by VET students.

**Poor educational performance may be due to educational disadvantage rather than the disability.**

**Learning outcomes: how much does the disability really matter?**

VET students who report a disability generally have lower prior education levels than other VET students. In addition, the educational achievements and outcomes from VET are relatively poor for students reporting a disability. Educational achievement prior to commencing VET affects students’ results in VET, which implies that the poor educational performance of students reporting a disability may be due to their educationally disadvantaged position rather than their disability.

Karmel and Nguyen (2008) explored these factors using a simple statistical model. They investigated the direct effect of disability on education outcomes by controlling for student characteristics such as educational background, age, level of study and field of study. The research found that, for some disability types (such as hearing/deaf, intellectual, acquired brain impairment and vision), the actual disability doesn’t explain poor educational performance once other student characteristics such as age, sex, educational background and course studied were taken into account. By contrast, both student characteristics and the disability itself directly affected the low completion rates of those with a physical disability, mental illness or a medical condition.

Overall, the significant point to emerge is that it is not helpful to treat students with a disability as one group. Different disability groups have students of differing background characteristics, and the direct effect of the disability on academic performance varies between groups.
The role of VET in the labour market outcomes of people with a disability

The Melbourne Institute of Applied Economic and Social Research conducted two projects investigating the role of VET in the labour market outcomes for people with a disability. Using the Household, Income and Labour Dynamics in Australia survey, the two studies offer an important contribution to policy deliberations about the provision of education and training opportunities for people with a disability.

The first project (Polidano & Mavromaras 2010) investigated whether completing a VET qualification helped people with a disability to obtain and keep employment. While the study found completing a VET qualification provided no further employment benefits for those already employed, for people who were not working, completing a VET qualification significantly increased the likelihood of subsequent employment — more so for people with a disability than without.

The second project (Polidano & Vu 2011) focused on how a VET qualification could improve the conditions of employment — wage rates, the probability of being in full-time employment and job satisfaction — for people with a disability. They also considered what happened in situations where a disability occurred when an individual was already in the labour market, with a focus on the extent to which VET and higher education qualifications may reduce the disruptive effects of disability onset.

The key findings from these studies were:

• Childhood onset of a disability was more disruptive to employment outcomes than onset in later life. This suggests that disruption of skill acquisition at an early age may have cumulative effects.

• People for whom the onset of a disability occurred later in life were more likely to be employed. This may be due to skills being acquired before the onset of disability but, more importantly, it may be because they have work experience. However, they are less likely to participate in VET compared with those who experience disability onset as a child.

• While people with a disability found it considerably harder to retain employment, VET completion strongly improved the chances of getting and keeping a job. Also, compared with those with no post-school qualification, for people with a disability, completing a VET qualification significantly improved the chances of attaining full-time employment from either being out of work or in a part-time job. With this comes greater financial independence.

• Completion of a VET qualification did not necessarily lead to greater job satisfaction, job security or hourly wage rates.

• Education begets education. People with a long-term disability (onset of a three-year disability spell) who have higher education qualifications were more likely to retrain relative to those with a VET qualification, who in turn were more likely to retrain than those with no post-school qualification.

These studies have provided a more nuanced picture of how VET influences the labour market outcomes for people with a disability. While it is still true that people with a disability are less likely to be employed after training than those without (as shown by the Student Outcomes Survey data), the Melbourne Institute studies show that VET brings significant benefits to the labour market outcomes for people with a disability.

What would it take? Employer perspectives on employing people with a disability

Waterhouse et al. (2010) point out that the voices of employers are largely missing from the research literature on employment for people with a disability. Their study goes some way to rectify that. Through interviews and focus groups with employers, mostly with small-to-medium-sized enterprises, the researchers investigated the attitudes of employers towards hiring a person with a disability. Overall, the employers who participated in the research were quite positive and open minded about employing people with a disability, but were often not confident that they had the knowledge, understanding and capability to do so — they lacked ‘disability confidence’. The research also found that:

• Disclosure (or more often lack of disclosure) of a disability was a key concern for employers, especially in relation to mental illness. However, employers readily conceded that this issue is mitigated if there is trust between the employer and employee.

• The role of trusted brokers and mediators emerged as a key issue. Small-to-medium-sized enterprises expressed frustration at their difficulties in accessing information about the employment of people with a disability relevant to their businesses.

• Employers were not looking for formal training in ‘disability employment’. They were looking for assistance in building their capacity to support the productive employment of people with a disability.
These findings are supported by preliminary results from the 2010 Department of Education, Employment and Workplace Relations Survey of Employers (2011). This survey confirmed that employers are generally favourably inclined towards employing people with a disability. The findings also showed that support from Disability Employment Services played an important role in the employment decision, further corroborating the finding by Waterhouse et al. (2010) regarding the importance of trusted brokers.

Government policy aimed at helping people with a disability into the labour market usually focuses on the supply side; that is, preparing people with a disability for work. This research suggests that policy also needs to address the demand side. Raising awareness and providing information and support to employers may be important ways to tackle employment issues.

**VET students need information on the support available, and staff need information on the boundaries of their role.**

**Mental illness and disclosure**

Of all the different disability types, mental illness can be particularly disruptive to education and employment outcomes. The research reports discussed above found that mental illness has significant effects on course completion and labour market outcomes, and is particularly difficult for employers to cope with. In a forthcoming report, Venville and Street focus on one of these aspects. They investigate the factors influencing successful course completion for VET students with a mental illness. An important aspect of the research is the role of disclosure and non-disclosure of mental illness in the experience of VET students and their course completion. A particular strength of this piece of research is that it describes the experiences of VET students with mental illness as reported by the students themselves. The key findings from the research were:

- The provision of support mechanisms for students with a mental illness relies on students disclosing their mental illness to the staff of the VET provider, either at or after enrolment. For students, the decision to disclose or not disclose their mental illness is difficult. They struggle to decide whether it is better to disclose or not.
- Students spoke of the fear of further stigma, prejudice and rejection as reasons for not disclosing their mental illness. However, for most students in the study, the desire not to fail — yet again — was the main reason for choosing to disclose their illness.
- Students and staff differed greatly in their views on disclosure. Most staff members expected students to disclose their illness. Reluctance to seek special attention or assistance was considered as being unwilling to be responsible and work with staff to ensure their educational success.

These findings, particularly those pertaining to the views of staff, support the findings from an earlier study by Miller and Nguyen (2008), which explored TAFE staff perspectives on supporting students with mental illness. This study concluded that a major issue for TAFE institutes is responding to the needs of students who do not disclose their mental illness.

These two research studies suggest that relying on students to disclose their mental illness to receive support is not working. This could be addressed by more actively promoting the disclosure of mental illness. However, Venville and Street show that there are many rational reasons why students choose not to disclose their mental illness, and it is likely that no amount of promotion will encourage all students to do so. An alternative solution, as suggested by Venville and Street, is to ensure that information about, and the provision of, study support options and reasonable adjustments are provided to all students, rather than being predicated on the disclosure of mental illness.

Other findings from Miller and Nguyen (2008) included:

- Staff reported that there was a lack of clarity about the extent of their roles in supporting students with mental illnesses. They acknowledged their responsibility to provide duty of care but agreed that their roles should not cross over to actual provision of personal support. Staff felt that community health services see VET as a therapeutic option for their clients, rather than as education.
- Staff require appropriate skills and collegiate support to respond confidently to the diverse needs of students with mental illnesses. This includes more opportunities for discussion and for debriefing sessions with experienced staff.

These findings suggest that VET students need information on the support available, and staff need information on the boundaries of their role and also require training, support and resources to enable them to provide appropriate assistance to their students. This would remain true whether the support system continues to rely on disclosure of mental illness (or any disability for that matter) or goes down the path of providing study support and reasonable adjustment for all students, as Venville and Street (forthcoming) suggest.
**CHALLENGES OF DISABILITY RESEARCH**

The Equity Blueprint drafted by NVEAC highlights the need for a definition of disability consistent across education sectors and statistical collections. When reviewing the literature on VET and people with a disability, Griffin and Nechvoglod (2008) highlighted several issues that impede research in this area: varying definitions of disability; the diversity of disability type and severity; and limitations of the available data.

Good-quality and up-to-date data are important for research in this area but are not easy to collect. All data collections rely on self-disclosure of disability, and so the data may well reflect a willingness to disclose rather than the true incidence of disability. Additionally, large numbers of people in data collections whose disability status is unknown increases the difficulty in interpreting data for this population. Despite these difficulties and limitations, it is important that we continue to measure levels of VET participation by and outcomes for people with a disability in order to give us some empirical basis on which to analyse issues and evaluate policy interventions and practice.

There are varying definitions of disability used in Australia. For example, the Australian Bureau of Statistics (ABS) defines disability as ‘any limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities’ (ABS 2010). The approach adopted by the National VET Provider Collection, based on data collected from enrolment forms in accordance with the Australian VET Management Information and Statistical Standard (AVETMISS), is slightly different: it reports on whether or not students consider that they have a ‘disability, impairment or long-term condition’. In both data collections people are invited to specify the kind(s) of disability they have, selecting from various types of disability, which in any case differ between the two collections. In the absence of a uniform definition of disability, researchers will continue to face difficulties in making comparisons between datasets. To help end-users understand the relevance and comparability of findings it is therefore important that disability is well defined in resultant reports.

The Equity Blueprint for 2011–16 drafted by the National VET Equity Advisory Council (2011) highlights the need for a definition of disability consistent across education sectors and statistical collections. The issue of definition is complicated by the diversity of disability. A challenge in researching this area is accounting for different types and severities of disability as well as the time of disability onset. The support needs and outcomes for people with a disability studying VET vary according to the type and severity of disability, while the time when people acquire a disability may also affect their pathways into VET or employment. Furthermore, disability can interact with other aspects of people’s lives — such as age, prior education and membership with other equity groups — and influence their experience in the VET sector.

Thinking more broadly than disability, the Equity Blueprint also calls for a more nuanced assessment of the VET sector’s performance for people who experience multiple forms of disadvantage. The National VET Equity Advisory Council argues that the multidimensional nature of disadvantage means that people do not always fall neatly into given categories. This points to the desirability of defining and thinking about disability in terms of the barriers it poses rather than the fact of the disability itself, especially when attempting to inform and change practice.

The Equity Blueprint also recommends that, in further designing the VET system, it is important to listen and act on learner voices, particularly those of disadvantaged learners. This, too, is valuable in research, but is very challenging. Accessing people with a disability for the purpose of conducting research is difficult due to (important) privacy requirements, a lack of willingness to disclose the disability and the possible discomfort at the idea of ‘being researched’. These constraints usually necessitate researchers making use of open-invitation recruitment strategies to encourage people to participate in research, which can make it difficult to attract enough participants and may also lead to sampling bias.

Future research should consider broader aspects of the lives of people with a disability, given that a ‘whole of life’ approach gives the best outcomes for people with a disability.

**So where to from here?**

Can the constraints to conducting good-quality research be removed, or at least reduced? If not, can research be conducted in such a way as to minimise the impact? It is easy to argue for better-quality data, based on an agreed and consistent definition of disability. It is also easy to argue that encouraging students to disclose their disability to VET providers at the time of enrolment would help both the collection of data and potentially the students’ chances of successfully completing their training. But these are not simple tasks. Changing large-scale data collections would be a huge and expensive exercise. And, disclosing a disability is a personal decision, and choosing not to disclose is sometimes a better option for an individual’s personal situation (Venville & Street, forthcoming). These constraints to research are likely to persist.
While the current data collections are not perfect, analysis of them is still instructive, and can point to where further investigation, through case studies and interviews, for example, may be useful. In addition, future research should attempt to draw together broader aspects of the lives of people with a disability, given that the recurring message in the literature is that a ‘whole of life’ approach often achieves the best outcomes for people with a disability. Multidisciplinary and cross-sectoral research could further this approach and may also serve to provide links between research and initiatives in the disability services area.

Research in this area is challenging, and will remain so. But as the studies highlighted in this At a glance indicate, even working within the limitations described above, research can throw light on how education can improve the lives of people with disabilities. It is also important, as Selby Smith and Ferrier (2004) argue, to ensure that we know what is being done to assist students with a disability in VET. We need effective evaluation and dissemination of good practice and closer connections between research, policy and practice.

REFERENCES

ABS (Australian Bureau of Statistics) 2010, Disability, ageing and carers, cat.no.4430.0, ABS, Canberra.


